

TELEVISIONS

Vol. 5, No. 4

\$2.50

HISTORY

Philo, Part IV

CHALLENGES TO THE CORPORATE MYTH

10

CABLE

Public Access Cable

ONE HUNDRED ACTIVE ACCESS CENTERS

15

ART

Lincoln Center

14

PRINT

"Prime Time Jesus" and China-TV

6

PROJECTS

CPB-ITV and DC-CBC

4

REVIEWS

"Speak-Out" Seattle

PUBLIC ACCESS SHOW ON COMMERCIAL TV

9

L.A. Cinematheque on KVST

The article on channel 68 was fascinating. The Los Angeles Cinematheque was one of those community groups that did programming. We did a show "Super-8: Its Bigger Than You Think"—just before the lock-out—that got an Emmy nomination, the station's first and I think as it turned out, their only. Our experience doing that show makes me disagree with an otherwise flawless report. It talked about the mistake of studio equipment and an attitude as well that discouraged grass roots community access. I can only speak for ourselves. Our 30-odd crew was made up almost entirely of people that had never worked on a television production in their lives before. Although I agree that portable equipment would have been better, these people didn't care a bit . . . ANY experience was better than nothing.

It was the only way most of them would ever have been able to get into a studio, much less handle equipment and be involved in the planning and executing of a program. I agree with all the ways that would have improved the operation, but I'm sorry the article didn't point out that in spite of all the problems there were many people that got their first taste of TV at KVST and there was no other station (and none at all now) in Los Angeles allowing that to happen. I wish it were back, in spite of the problems, it was all we had.

Tee Bosustow
Los Angeles
Cinematheque

Correction: "The Quality of TV Acting"

We regret that "The Quality of Television Acting" by James Hindman in the Vol. 5, No. 3 issue of *TELEVISIONS* was printed incorrectly on page 20. The corrected version appears below. Reprints of the entire article are available from us. Write *TELEVISIONS*, Box 21068, Washington, D.C. 20009.

Time can only be artificially separated from space in this discussion, since its use lies at the heart of how *anything* works on TV. As soon as I got seriously behind the cameras and into the control room, I was struck by how *flat* TV seemed. The low resolution and weak light level of the monitor screen would not hold my interest in a TV image for long. Only motion attracted me: camera, cut, performer. However, the lack of differentiation in the TV image sustains a documentary effect, borne out by the length of shots in interview shows. Video artists such as Allan Kaprow extend the flat, documentary look by lengthy studies of simple, pedestrian gestures, held or repeated endlessly.

In contrast, the tightest control of time in broadcast TV (outside of commercials, another whole subject) appears on high-action programs, especially police

shows. The actors on *Kojak* work with incredibly small increments of time, reflected in camera and cutting and particularly in dialogue. Episodes are composed as a series of one-liners, short sentences done as separate shots. The actor has to complete a distinct unit of information with each line. There is little continuity or build for the actor; instead each shot is a finished sentence with a downward vocal inflection, set in a fixed gesture or attitude. The effect created by the actor, particularly by Savalas, is monochromatic, discrete, abbreviated. Responses are telescoped and presented with the terseness of a telegram. There is no visible waste in gesture or inflection. Pauses are created strictly by the cutting, not by the character. Camera work and tempo end up creating an equivalence between the actor (and, by extension, the character), the props, the locale.

Friends of KQED

Early in 1978, we're going to have an unprecedented opportunity to help spend a billion dollars on Public Broadcasting. And help shape the future of Public Broadcasting in America.

As media activists, we know how dismal the past has been. We're all too familiar with the gap between the promise of public broadcasting and its performance. We've seen the promise of open, democratic management, local control and responsive programming go unfulfilled. And we watched as public broadcasting drifted toward commercialized, narrow programming, and unresponsive management.

Many of us have been active in regional attempts to "put the public back into public broadcasting." And we've experienced varying degrees of success. But we've also experienced the frustration of trying to influence public broadcasting without adequate tools or leverage.

In many ways, we've been limited to addressing the symptoms. Until now.

The key is the appropriations bill, HR 9620, now before Congress. The bill, sent over by President Carter last October, provides \$1 billion in direct federal funding for the Corporation for Public Broadcasting (CPB) over five years.

The Carter Bill isn't everything we need: it doesn't provide us with all the tools necessary to make public broadcasting truly public; and it leaves unanswered several important questions—who controls? who are the stations accountable to?

Some answers lie in amendments to the Carter Bill. They include some important reform provisions which will have far-reaching positive effect on how public broadcasting is run. The amendments are necessary *and* we think, achievable.

The bill directs CPB to adopt "sunshine" policy for all public broadcasters. Meetings of governing boards and committees will open to the public as other public agencies now must. A station's annual financial reports to CPB will be put into its public file.

This important section needs strengthening. All station records

should be opened within the guidelines of the Federal Freedom of Information Act. We also believe that in order to qualify for federal funding, community stations (those operated by non-profit corporations established for that purpose) should be required now to provide direct election to their governing boards by the community of their broadcast license.

Title VI of the Civil Rights Act of 1964, and Title IX of the Amendments to the Education Act of 1972, will now be directly applicable to CPB and whomsoever it funds. This will end arguments about whether or not CPB—a non-profit corporation—must comply.

The Carter administration has announced a commitment to amend the bill to further strengthen anti-discrimination provisions in employment.

Diversified programming would be encouraged through a National Programming Fund set aside, to which independent producers as well as public broadcasting stations would have access. (A similar source of funds for local programming is *not* provided. We believe it ought to be.)

The appropriation is designed so that a meaningful review of progress can take place in two years—when the new Carnegie Commission on the Future of Public Broadcasting will have made its recommendations. The progress of *reform* could be an important criterion for judging CPB's requests for supplemental funding in 1980. Also the bill amends public broadcasting's Declaration of Purpose to emphasize—specifically—service to minorities and citizens in areas not yet served by public broadcasting. The bill asks CPB to set a long range plan for facilities—citizen groups ought to help determine the plan's features.

Opposition forces in the industry are particularly antagonistic to the sunshine and accountability aspects of HR 9620, and to the set-asides for independents, minorities and citizen groups. There are indications the broadcasters might even risk their five-year funding bill for a one-year stop gap appropriation, to halt reform.

Congress must act by May 15th to insure continuity in CPB's funding cycle. Subcommittee hearings in both the House and the Senate will be held early in the year. . .

The most important thing all of us can do is express our views on Public Broadcasting *now*. Request to testify before the Congressional Subcommittees, or ask to submit written testimony. . . .

For the House, you can write Representative Lionel Van Deerlin, Chairman, Subcommittee on Communications, U.S. House of Representatives, Washington, D.C. In the Senate, write to Senator Ernest Hollings, Chairman, Subcommittee on Communications, U.S. Senate, Washington, D.C. . . .

Friends of KQED
San Francisco, California

Reader Complains

Dear Whoever:

Sometime ago (almost a year now, I'll guess) I subscribed to *TELEVISIONS*, and of this writing have yet to receive an issue. In the past I just said the hell with it and borrowed friends' copies, but either I now have the wrong friends, or your magazine hasn't reached TENNESSEE yet, and I would like to see the current issues.

Please check your records and advise.

Blaine Dunlap
Murfreesboro/Tennessee

Editors Reply

We appreciate receiving letters like this, because our third-class non-profit mailing doesn't always reach subscribers. If you don't receive your issue please let us know. This is the fourth issue of 1977, though you're receiving it in 1978. The magazine is put out by a volunteer committee of editors who work on *TELEVISIONS* in addition to their paying jobs. Our budget will enable us to put out four more issues in 1978 and to hire a proofreader who will help us avoid the errors like the one corrected on this page. For the first time we have also hired someone to handle our subscriptions and take care of subscriber complaints. We welcome your feedback and contributions.

TELEVISIONS

Editors
VICTORIA COSTELLO
NICK DEMARTINO
GAYLE GIBBONS
LARRY KIRKMAN
PATRICIA MOLELLA
REBECCA MOORE

Photo Editor
LEONARD RIZZI

Contributors
ALEXIS GREENE
SARAH ORDOVER
SALLIE FISCHER
RON SUTTON
MAURICE JACOBSEN
ERIC CARLSON
F.H. STEIN
RICHARD SIMMONS

TELEVISIONS Magazine is a quarterly publication of the Washington Community Video Center, Inc., P.O. Box 21068, Washington D.C. 20009. Phone: (202) 331-1566. All contributions of articles and photographs are welcome, though we cannot guarantee publication. Send stamped, self-addressed envelope if return is desired. *TELEVISIONS* is composed by Circle Graphics. The opinions expressed herein represent those of the staff, except when articles are signed. Copyright *TELEVISIONS* Magazine 1978. All rights reserved. No part of this periodical may be reproduced without the consent of *TELEVISIONS*. Subscription rates: \$10 per year (special prepaid rate) \$15 per year if billed, \$15 per year institutional rate. Back issue price: Vol. 1, \$25; Vol. 2, \$5; Vol. 3, \$6; Vol. 4, \$2.50 for single issue. *TELEVISIONS* is funded in part by grants from the Rockefeller Foundation and the National Endowment for the Arts. Vol. 5 #4 was printed Jan. 1978.

You may now buy *Televisions* in New York 8th Street Bookstore, Soho Books, New Yorker Books, Cinemabilia, Association for Independent Video and Filmmakers (AIVF); Washington, D.C.: Kramer Books and Afterwords Kramer Books; Madison, Wisc.: Pick a Book Strubbs, University Bookstore, Madison Book Coop, Little Professor; Milwaukee, Wisc.: Broadway Reader, University Sotre, City News; Los Angeles: Larry Edmunds Books, Papa Bachs Paperbooks; San Francisco: S.F. Museum of Art Bookshop, La Mamele Arts Center, Modern Times Bookstore; Portland, Oregon: Fifth Ave. News; New Orleans: New Orleans Vide Access Center (NOVAC). (Other Southern outlets to be announced).

THE 526TH LINE

The extra scan line presents our Point Of View on the state of communication arts, business, and public action.

Childrens Television Workshop, CTW, in another example of working from within and judicious compromise, has joined with the largest ad agency J. Walter Thompson to secure \$3 million from Kraft Foods as sole sponsor for two one-hour commercial kid shows to be broadcast on CBS in prime time, 1979. Kraft foods makes several products aimed at children including caramels and marshmallows. The ads vs. story message is more than confusing for kids. It is directly destructive to their health and understanding of nutritional value.

We kiss in boardrooms now, said Joan Ganz Cooney, President of CTW, in what seems to be a related story. The January-February 1978 issue of the *Harvard Business Review* contains a revealing interview with Ms. Cooney, titled *A Woman in the Boardroom*. As a director of First Pennsylvania Corporation, First Pennsylvania Bank, Xerox Corporation, and May Department Stores, Ms. Cooney sees herself as a spokesperson for women, children, media, and education. We were fascinated by her notions of what these boards represent and how they affect her self-declared constituency. We thought we'd pass on a few representative quotes, but encourage you to read the full interview with the woman who has engineered public television's greatest success.

"If being feminine means . . . not for a minute shying away from having the door opened for me, the chair pulled out, men standing up for me—we kiss in boardrooms now—I'd never give that up; I couldn't."

"...at a stockholders' meeting Vernon Jordan spoke about Xerox's often challenged presence in South Africa and was so persuasive in his explanation of our operations there that many of us asked for copies of his

talk. Other companies that have investments in South Africa particularly wanted copies. As for women, well, of course I sometimes go shopping through a store for May and then give a report at the board meetings on how service is and so on. Now a man could do that but probably not as effectively as a woman can, because she could go easily to more departments. Women can be particularly helpful in regard to consumer interests." In the last line of the interview Ms. Cooney responds to a question about the difficulty of keeping herself fashionably dressed, "Sure, it's a killer," she says, "but I'm determined to die pretty."

Before he resigned, Henry Loomis sent out a letter to many independent producers who had received grants over the years. He was responding to a letter by Rep. Henry Waxman (D-Cal) which noted public television's "lack of comprehensive commitment" to independent producers, and suggesting "the establishment of an office representing both PBS and CPB" as an effective answer to the disturbing, seemingly arbitrary pattern of decision-making regarding submissions of product by independents. Loomis' canvas of support from independent producers who have received funding followed lengthy replies to Waxman by both Loomis and PBS's Larry Grossman, both claiming that the charge is inaccurate, that the system does work for independents.

But Loomis' attention to the problem, as well as Grossman's promise to prepare "a single, comprehensive document of the national program procedures, politics, criteria, and access points in public television" is evidence that the issue has become noticed. With similar attention being shown at the Carnegie II hearings and staff work, the issue of independent

production has indeed been put on the agenda. Whether the final outcome makes any difference after the words have settled remains to be seen, but the ability of independents to organize themselves into an effective and broad constituency is vital to the evolving changes within the public TV industry.

They're calling it Loxton's Lottery, the competition for less than half a million \$ among film and video independent documentarians being administered for public TV by WNET/13. Over 800 proposals and sample works had been received by the deadline right before Christmas, swamping David Loxton's TV Lab staff and forcing administrator Kathy Kline to seek legions of volunteers and temporaries to process the stuff. The rush was necessary because 28 "screeners", drawn from the ranks of showcase and exhibition centers from around the country, were required to review between 20 and 30 proposals and make thumbs-up or thumbs-down recommendations by the end of January. According to Kline, these screeners will narrow the field down to 60 or 70 competitors, a figure that will be halved again by herself and Loxton before submission to the designated panel, which includes PTV officials and filmmakers (no videomakers).

The competition has excited producers from all segments of the film and tape community, despite the fact that only eight programs at most will be funded, primarily because of the tremendous and diverse response the proposal solicitation brought.

Kline told *TELEVISIONS*: "The number of responses indicates that there are far more independent film and videomakers surviving as such than most of us have been aware of." Many of them, she noted, submitted industrials or first student films as their sample, which might not warrant their showcasing on national public TV, but the impact of numbers is bound to impress the current funders (the NEA and Ford Foundation), as well as potential new funders for this project.

Meanwhile, the other major funding source for documentaries on public TV, a million-dollar fund put up by the Corporation for Public Broadcasting and awarded last spring to 10 producers (some working inside, others outside PTV stations), has faced its first test. The report card isn't too good. This optimistically titled Revolving Documentary Fund was designed so that CPB could finance productions which would be offered to stations for sale. These revenues would then return to the fund to support new work. The first two documentaries offered were sold to 10 and 40 stations, respectively. Least popular was Don Widen-der's *Plutonium: An Element of Risk*, primarily because PBS programming staff attached a warning that the work didn't meet its journalistic standards. A controversy ensued over the wisdom of the move, spilling into the pages of the *NY Times*, *MORE* magazine and elsewhere in the press. The second

show, *Even the Desert Shall Bloom*, about water in the West, at half the price as plutonium, still didn't attract enough buyers to be placed into the PBS national schedule. The show is a competent documentary in the traditional mold.

Evidence is that PBS stations are unwilling to pay anything for documentaries, whether they are controversial, boring, innovative or traditional. If national planners are wise, they will call the "experimental" fund an error and offer the entire documentary package to PBS stations for free. Otherwise the American viewing public, which has paid for the documentaries, may not have the chance to see them.

Currently the major battle in Public TV is the determination of who controls how many of the four full-TV-with-stereo-sound satellite channels which will begin being phased into the public TV system this year. In a series of studies reflecting various power centers within the industry, recommendations are being made for one or another plan. What had been taken for granted (by PBS)—their total control of all four transponders—has now opened the battleground that will define the capabilities of public television for decades.

One group of station people, along with representatives of the existing public TV regional networks, would like to place control of two of the four channels with an Access Management Council separate from, but overlapping with PBS. The idea here is to put more power into the hands of station management, and less from the lay boards, which heavily dominate the reorganized PBS board.

The large producing stations realize that new networks of affinity will be made possible by the geosynchronous satellite, and that by extension it will be unnecessary to buy the entire PBS network, that stations, or corporate underwriters, or independent producers, for that matter, can market and build special interest networks to meet their own needs. PBS would operate the main service on two channels, leaving two for first-come, first served use.

Don't buy a betamax, to paraphrase *Medical Economics*, the monthly magazine that advises doctors on how to spend their income, median of \$62,800 in '76. Or for that matter, they say, any other videocassette recorder/player because "in a year or so, you'll also be able to buy an attachment for playing shows prerecorded on videodisks—at half the tape-unit cost." Their headline is "TV Recorders: It Will Pay To Wait." And they know.

The vile video award this month goes to an ingenious home-unit advertiser whose advertisement argues that a great reason to have a recorder with camera is to catch your husband snoring and play it back to him. With campaigns like that the playback only videodisc is a shoo-in.

CONTENTS

Resources

4 PROJECTS

First national study of instructional television; Everson curator on Spanish video artist; Austin Community Video Museum Project; Competency Based Curriculum Teacher Training.

6 PRINT

How To Read A Film; *Cultural Correspondence*; *The Video Guide*; Industrial TV report; TV in China...

8 SURVIVAL

Business Support of the arts, PACT; media grantees and calendar.

9 REVIEWS

"Speak Out" access show on commercial TV in Seattle and Nancy Holt's "Revolve".

Departments

10 HISTORY

Conclusion of the Philo T. Farnsworth Story. By Paul Schatzkin.

14 ART

Marketing "Live From Lincoln Center." By Alexis Greene.

15 CABLE

Maurice Jacobsen looks at seven years of public access. Sallie Fischer profiles four centers.

19 EPILOGUE

The story behind the Philo T. Farnsworth Story. By Nick DeMartino.

RESOURCES

PROJECTS

Instructional TV: Results of First National Study

ITV used in 71.5% of U.S. school rooms

By RON SUTTON

Instructional Television is a bit like "chicken man—it's everywhere, it's everywhere!"—but no one knows in exactly what quantity. That is no longer true. The first nationwide study of school ITV use has been completed. Detailed analysis of all findings will be forthcoming in a series of reports issued from Jan. to June of 1978; but, study director, Dr. Peter J. Dirr, has released a preliminary report. He prepared this report for the Annual Conference of the National Association of Educational Broadcasters and it was subsequently printed in slightly abbreviated form in the Nov. '77 edition of *Educational and Industrial Television*.

It may shock and surprise you to learn that this study is a *first* in the twenty-five year existence of instructional television (ITV), there has been no attempt to determine the role played by this medium nationwide until now.

The preliminary findings are fascinating. For example, approximately 30% of all teachers use ITV regularly, 30% of all educators (not just teachers) have experienced training of some kind in the use of ITV, slightly more than 30% of all school districts offer in-service workshops on ITV use, and as many have given some one person in the district responsibility for ITV.

In response to the attitudinal aspects of the study, it appears that "more than 50% of all educators expressed positive attitudes toward ITV, while fewer than 10% view it negatively. There is still a body of educators, approximately 40%, who have not formed strong opinions about the medium." (pg. 11 *School TV Utilization Study* from Dr. Dirr) If this is true, it is amazing testimony to the patience and good will of educators. It is also an excellent opportunity to convince the 40% that ITV can become an effective educational resource. That only 10% view ITV negatively frankly surprises me—which is what properly designed studies are supposed to do—challenge our assumptions which are usually based on limited experience and intuition.

The study was carefully constructed by Dr. Dirr, who took a leave of absence from his post as Coordinator of Research of the College Learning Laboratory of the State University College at Buffalo, N.Y. The study is officially known as *The School TV Utilization Study (SUS)*. It used a random sampling technique of public school superintendents, principals, and classroom teachers in all U.S. school districts with an enrollment of 300 or more. It included a sample of elementary school teachers and principals and superintendents from Catholic diocese (representing the private sector). Specially designed and thoroughly

tested questionnaires were sent to 933 superintendents, 1850 principals and 3,700 classroom teachers and after a three round follow-up (postcard, mailgram, phone call) the following usable returns were received: Superintendents—899 (96.4%), principals—1,648 (89.1%) and teachers—3,152 (85.2%). Dr. Dirr told me in a phone interview that a 74% return was what they needed for national projection.

Dirr states confidently in his printed report (and backed it up on the phone) that: "Although the data presented are based on samples, they are not likely to differ by more than a few percentage points from the results which would have been obtained from a complete canvass of all public school districts, schools and teachers (in districts enrolling 300 or more students) and all Catholic dioceses, elementary schools and teachers. Those numbers are estimated to include 12,000 superintendents, 90,000 principals and 2,275,000 teachers" (pg. 3—*School TV Utilization Study* fr. Dirr).

Careful checking of the statistical

Damming the information flow. A catalog of people, meetings, books, survival techniques, and directions on how to find what we left out.

plied by cassettes/films/videotape and 10.7% by cable which together rival the public TV stations offerings to the schools. It will be interesting to see these same projected figures in a follow-up survey 3-5 years hence. My estimate is that cassettes and cable will move well ahead of public TV stations as sources of ITV.

It was also interesting to note that TV sets are available to 68.1% of teachers (and conversely 21.9%, or close to 1/4 of all teachers in the country teach without access to TV)! As you probably anticipated, 66.2% report only black and white sets, 15.8% color and 18.0% have both. That will change too in the next 3-5 years with color coming to eventually dominate. 38.7% of the teachers reported having record and play back equipment.

On the basis of what was revealed in the preliminary report, I was favorably impressed by the objectives associated with the use of ITV and students. Dirr estimates, (using two entirely different but related methods), that approximately 15,000,000 students watch ITV regularly with the nation's classroom teachers. More about the characteristics of both groups will be in the detailed reports. The reports will cover:

Teacher Characteristics—Jan. 1978
District and School Characteristics—Feb. 1978

Technical Report—Feb. 1978

The School TV Utilization Study revealed that

71.5% of the nation's classrooms have ITV available; and

30%

- ...of all teachers use ITV regularly
- ...of all educators have had training in ITV use
- ...of all school districts offer workshops in ITV
- ...of the school districts have a staff person responsible for ITV

base and reliability of the projections will have to await the detailed reports.

In any case, a broad definition of ITV was used in the study — "any in-school uses of television (either broadcast or recorded) for instructional purposes." If it is TV and is used in school for instruction, it qualified as ITV for the study. This seems quite reasonable to me for a first time, bench-mark survey. Undoubtedly further breakdown in response would be needed to differentiate "systems delivery" from a tape or cartridge deck in the room or building. Along this line, it was interesting to note that 3.2% of the teachers admitted not knowing how the TV signal reached their classroom.

ITV programming was available in 71.5% of all classrooms and public TV stations led the list of sources for it. They supplied 40.4% of ITV programming with commercial TV adding 17.9%. But I found it fascinating that 25.7% was sup-

plied by cassettes/films/videotape and 10.7% by cable which together rival the public TV stations offerings to the schools. It will be interesting to see these same projected figures in a follow-up survey 3-5 years hence. My estimate is that cassettes and cable will move well ahead of public TV stations as sources of ITV.

Dr. Dirr and the Study are sponsored by the Office of Educational Activities at the Corporation for Public Broadcasting (CPB) with assistance from the National Center for Education Statistics (NCES). The final reports will be released by these two sponsoring groups which are mandated to:

- gather information about the uses of non-commercial radio and television in instruction (CPB)
 - document ITV's success and failures and to encourage the formulation of policies and practices which will maximize the benefits of these media to learners (CPB)
 - provide timely and accurate data on the condition of education (NCES)
- We can only applaud this beginning of

a comprehensive data base which describes the state of the ITV "art." It will be interesting to see the effect of this data on market place and educator alike. It will become increasingly valuable if follow-up surveys are done every two or three years.

For present preliminary report and for additional reports as they appear in 1978, contact: Dr. Peter J. Dirr, Project Consultant, Corporation for Public Broadcasting, 1111 16th St. N.W., Wash., D.C. 20036, Phone (202) 293-6160.

Ron Sutton teaches in the Visual Media Program in School of Communication The American University

Video Art: Spain and Syracuse, N.Y.

By RICHARD SIMMONS

Antonio Muntadas is a Spanish born video artist who is active in New York City, Europe and South America. He participated in Documenta 6 and is now a research Fellow at the Center for Advanced Visual Studies at M.I.T.

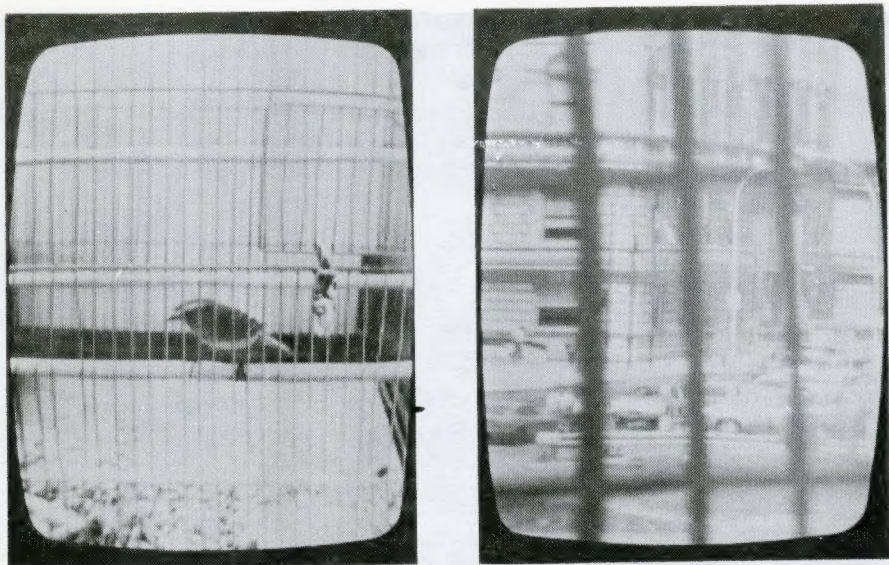
Some of his tapes will be shown at Anthology Film Archives on Feb. 25, Sat. 2:30 pm and Feb. 26, Sunday 8:00 pm (see calendar).

In Spain, the artist has always been in an honored position. As in other European countries, the latest work of a painter or sculptor was very often commissioned by the church and the people were expected to understand any significance in a picture. The artist was, above all, credible and his decisions were received with interest.

Now that the artist is no longer committed to Biblical reference he is free to address himself to either the human condition or compositional sensibilities. He has not, however, relinquished his position in society as interpreter of mystical truths. It is this heritage of the artist which has allowed Muntadas to evolve as social correspondent, an almost unavoidable circumstance, especially in an era of new humanism.

In his works from around 1971, Muntadas underlines the importance of sensory development. He began with pieces using just one person but soon did a series of activities involving large groups. (Some of these projects were exhibited as photo-documents at the Everson Museum, Syracuse, N. York, April, 1977.) Through these activities Muntadas developed as an observer of the posteriori effects of the social gathering. Other projects followed which gave him the opportunity of observing a variety of social activities, ("Markets, Streets, Stations") and the behavioral aspects of each.

Through his use of television as a documentary tool and his continued interest in human behavior and communications he began to evolve a sensibility about television. "Cadaques Local Channel" is an example of this sensibility. Under the cover of "artistic experi-



"Bars" by Muntadas, a closed circuit TV installation shown at the Everson Museum, April 1977. The monitor on the right shows a familiar local scene near the museum. The camera for this monitor was secluded in another part of the museum and bars were taped to the window.

ence" and the auspice of the town gallery, an alternative TV network was formed which operated for four days.

Because of the strict measures imposed on the dissemination of information in Spain, the character and reputation of the town gallery was essential in the realization of the work. Monitors were placed around the village at regular meeting places and were located next to the existing television sets in each meeting place. Programs were produced which reflected the local reality of the village. The town gallery was equipped with a transmitter and the live network became an extended portrait of the village in comparison with the strict informational codes depicted on the government controlled channel.

Characteristics and contrasts between the two channels became evident as the project extended across the four days. The language, attitudes and gestures, and treatment of the television images on the existing channel became evident as a false, fixed reality, whereas Muntadas' channel held a mirror to the life of the village.

As the work continued, and as more villagers participated in the work, it became evident that there existed not only a new level of communication but a new level of creativity as well. His point about television is not just realizing the lack of and offering a model for, communica-

tion, but the fact that television as it exists anywhere, does little to stimulate one's imagination.

This re-affirmation of individualism in thought and imagination is the crux of Muntadas work. What appears to be framing devices for Realism turns out to be a compositional sensibility for an existential dialogue between the information furnished and the receiver.

Muntadas uses his work to create a state of mind leaving the viewer to discover and develop a passionate awareness through individual freedom and integrity—something television in its coercive power has diluted in our lives.

Richard Simmons is Associate Curator of Video at the Everson Museum of Art, Syracuse, New York

Native American Public Broadcasting Consortium Inc. (NAPBC) held its first board meeting this September in Lincoln, Neb., site of its national headquarters. Funded by CPB for \$103,113, NAPBC hopes to establish a program library for and about Native Americans, and to develop a membership from public television stations. Some 72 public TV stations are represented in the Consortium. Next meeting is May, 1978, in Lincoln. Contact: Nebraska ETV Network, P.O. Box 83111, Lincoln, NE 68501, (402) 472-3611.

"Photography and Social History" is the title of an Austin Community Television series which will bring the substantial photography collection of the University of Texas to the viewing public. Brian Owens, in conjunction with Austin Community Television, has been awarded a \$9,060 grant from the National Endowment for the Humanities to develop the pilot series. The series will explore the application of video and television to the exhibit function of museums and libraries, while at the same time providing televised public access of this photographic resource.

The aim of the series is to provide taped programs with social commentary to aid museums with limited space and personnel to produce exhibits for the museum-going public.

The university's collections include some of the most important historical collection of photographs west of the Mississippi, the entire print and negative files of the *New York Journal-American*, 1895-1966, depression era photography and the West Texas pioneer era.

The project plans to survey museum personnel to explore applications of television and video for museums, research centers and libraries. It also aims to gauge the interest of public access television and cable television systems in carrying these "electronic exhibition" programs.

For further information about the project, contact Brian Owens (512) 447-5069, or Alan Winter (at ACTV) 453-1300.

With grants from NEA and the Lilly Endowment the Booker T. Washington (BTW) Foundation is compiling a catalog of tapes and films to use for a Community Arts Cable Network (CACN). Three demonstration cities in the South will inaugurate the project, including Knoxville and Frankfort. While funds for the project are being invested in distribution rather than in purchase or rental of tapes, there is a promise of future payment. Additionally, the definition of "art" is broad, and includes a variety of documentaries, art pieces, children's programming, etc.

BTW currently has facilities for viewing ¾" cassettes and 16 mm film, but could accommodate other formats. Contact: Liesel Flashenberg, Media Software Program, Booker T. Washington Foundation, 2000 K St. NW, Washington DC 20006, (202) 857-4800.

In France, President Giscard d'Estaing has given the go-ahead on a government funded project to set up a network of 1000 outlets for large screen auditorium television. He calls it "a new method of communication, midway between cinema and TV...a way of distributing cultural and educational product nationally...and regenerating collective pursuits and counterbalancing the pressures that confine individuals to solitary and self-centered existences."

The decision followed a three week experiment costing \$2.4 million that beamed programs to specialized audiences including nurses and doctors for medical training, stamp collectors, films for immigrants, as well as popular audience shows, sports, etc.

In fact, the first stage of the 5 year plan to install the viewing sites and connections, is a series of one shot shows featuring soccer games. Similar to the

closed circuit boxing, and rock and roll shows marketed through theaters in this country, the social value seems to be open to question.

New Series For Teachers From D.C.

By SARAH ORDOVER

In an effort to bring "new directions" to the D.C. educational system, the D.C. Public Schools has produced a series of 24 television shows entitled *Competency Based Curriculum*. Aired on the PBS station, WETA, CBC is the only local program provided for district residents, and is an example to WETA that a little bit of local programming can go a tremendously long way.

Competency Based Curriculum is a quick training program, designed to bring the teaching methods of the 7,000 teachers in the District of Columbia up to subsistence level. Low scores in scholastic testing of D.C. children has prompted this program, which airs twice weekly, to focus on a behavioral approach to learning. During each program, groups of teachers, in a relaxed interview setting, discuss how to standardize the teaching of material skills, phonics or simple mathematics, according to criterion based methodology.

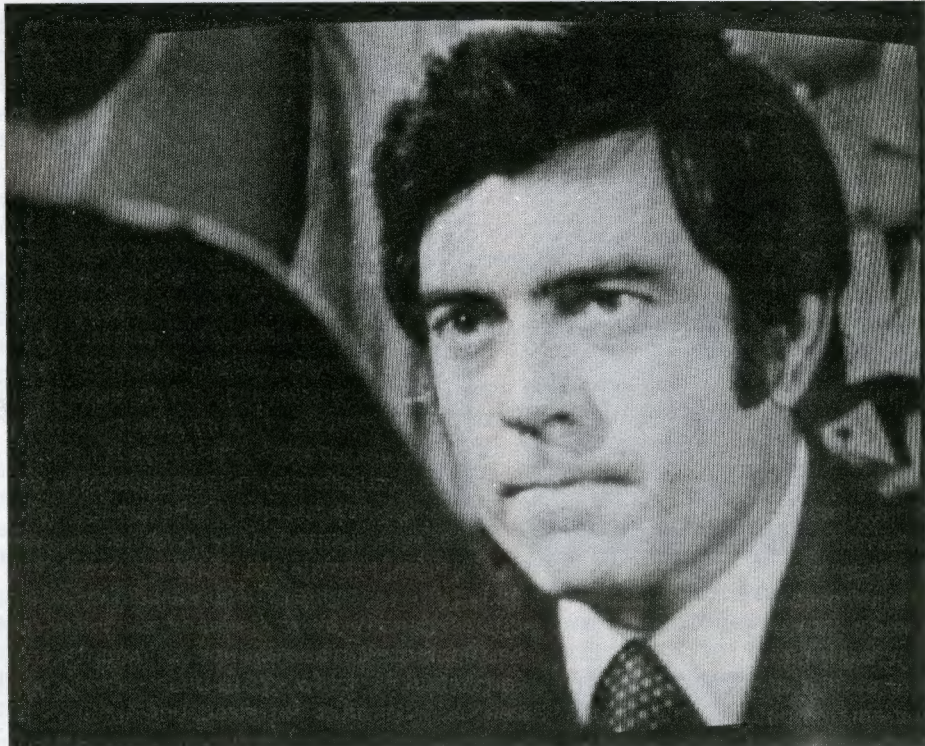
This orientation has met some resistance by humanist educators who feel that it does not consider process as an element of learning. "It is difficult to always expect that learning is going to take place at that moment," objected one D.C. school faculty member.

Despite its non-humanist bent, 28 other states have already shown interest in airing *Competency Based Curriculum*, realizing its usefulness as a way to standardize the parameters of a classroom experience. The D.C. Public Schools hope to syndicate the series at a cost of \$25,000 per station, and will easily make back their initial investment of \$190,000 for the series production.

Elizabeth Campbell, V.P. of Public Affairs of WETA, is "extremely pleased" with the success of CBC. But, if the show is syndicated, WETA missed a good opportunity by not producing the program itself. The proposed budget from WETA for production at their studio was \$360,000. The schools turned them down in favor of the University of the District of Columbia's Washington Technical Institute's bid of \$190,000. WETA provides free air time.

The Washington Technical Institute, a technical training school, was eager to produce CBC in their studio. Associate superintendent for the D.C. schools, James T. Guines, who has been in charge of the program, expressed delight in "the fact that these trainees are graduates from our school system, doing a course to help many of their former teachers to be more effective with the younger generations, their sisters and brothers."

Besides watching the programs, the D.C. teachers may receive graduate school credits from the U. of Maryland by attending Saturday follow-up workshops. An overwhelming response to this course offering, has prompted the school system to repeat the series in the spring and summer so that the 1,100



teachers who wish to receive the formal class training may be facilitated. CBC is not just limited to teachers. D.C. Public Schools have encouraged parents to view the programs so that they may better understand the educational process.

Many suburban communities in Md. and Va. have asked to join in the program. Provisions are being made for the spring to allow suburban teachers in the Saturday classes. This will be the first time D.C., Md. and Va. teachers will sit down to discuss metropolitan education.

In the past, the D.C. schools have been reluctant to get involved with WETA, because their programming was not relevant to urban kids. But with *Competency Based Curriculum*, a better rapport has been established between the two. New ideas are in the works for future D.C. school produced programs, one a TV call-in program to gain a consensus on what the community wants and to legitimize educational values.

The Community Advisory Council to WETA is exploring the possibility of encouraging other professional people to make programs of this nature. The success of this quick training program may boost community interest in using the station's air time. Who knows, perhaps WETA will produce something itself.

Sarah Ordovery has worked in broadcast production and is researching an article on Public Television's local programming.

The National Science Foundation's Research and Management Improvement Program sponsored 35 projects to improve administration of federally sponsored research in universities. Iowa State University as one of the projects. Research was done there on sharing research equipment. A color videotape is being disseminated on their findings. It describes the basic concepts, methodology and outcome of a program to assist faculty members in locating and sharing scientific equipment. Tape is available for rent or sale from: Media Resources Center 121 Pearson Hall, Iowa State Univ., Ames, Iowa. 50010.

Telemation has added an Arabian font to its character generator, goes from right to left. Cost: between \$40k and \$64k

PRINT

Monaco's How To Read A Film

A critical view

By F.H. STEIN

How To Read A Film: The Art, Technology, Language, History and Theory of Film and Media. by James Monaco. Oxford University Press: New York 1977. 502 pages.

"Film and the electronic media have drastically changed the way we perceive the world—and ourselves—during the last eighty years, yet we all too naturally accept the vast amounts of information they convey to us in massive doses without questioning how they tell us what they tell. *How To Read A Film* is an essay in understanding that crucial process — on several levels." From preface of *How To Read A Film*

To fulfill this aim James Monaco decided to explore the art, technology, language, history, and theory of film and media. He is quite effective in his film presentations but misses the mark when he discusses media. Trying to combine all of the above with practically all of the audio-visual media resulted in a rather sketchy chapter. He barely has space to devote to any given branch. Less than a page is given to video and less than a half of a page is given to CB.

Monaco writes best when he discusses film. His justification of film as an art, his syntactical analyses of film construction, and his survey of film theory from Vachel Lindsey to Christian Metz are stimulating and lucid. He writes well and succeeds in clarifying some of the more baffling and esoteric concepts of film interpretation.

The heart of the book is the chapter on the language of film. Here Monaco presents his central thesis—film communicates in a language of its own. Comprised of signs and codes and held together by a hidden syntax this language is the major, if not the only, means of understanding a film intellectually. Almost anyone can grasp a film, but few can comprehend it consciously unless

they have learned the language of film: how to read it.

The elements or words and phrases of film language are the shots, camera angles, lighting, camera movement, focus, etc. The syntax is the assembly or editing (montage) and the full composition of a shot (mise en scene). Using examples from all sorts of movies he refers to 2001's transition from prehistoric club to space platform as a match cut (syntax) which uses two similar shots in contrast to develop dialectically new information. Godard's ten minute tracking shot of a traffic jam illustrates how this kind of sign can be used as "a tool of intellectual analysis (as well as a grand joke)."

Monaco's fascinating discussion of film as a language is both fruitful and, when you strip away the esoteric theory, quite practical. It should be especially useful to many young film practitioners as well as the older ones. His compendium of production techniques (and in film techniques are tools) could provide a myriad of options to consider when directing, writing, shooting, or editing. Too often these various disciplines are practiced either intuitively or by rote without any consideration of options. Decisions are made on hunches or narrow expertise alone. Under these circumstances if the wrong decision is made it is hardly considered in conjunction with other choices. An effective production teacher could adapt the elements of this chapter on language and make it the cornerstone of both elementary and advanced classes.

A number of key ingredients missing in Monaco's presentation tend to distract from the usefulness of semiotics as a critical tool. He never analyzes either a whole film or a sizeable section from a couple of films to demonstrate his brand of semiology. Using singular examples, stills, drawings, and charts smacks more of salesmanship than scholarship. Examining the language of film in such

works as *Blow-Up*, *Midnight Cowboy*, or *Last Year at Marienbad* would not only demonstrate the process, it might give us more insight into those films.

Another certain drawback in semiotics as a critical tool is the elimination of characterization by actors. Although they are the subjects of the camera, the performers use it and contribute to the overall language as much as the manipulative technological instruments. He speaks of the persona but cannot seem to find a place for it. He discusses the trope, but doesn't develop it as a part of the film language.

Preceding the chapter on language is a brief history of image and sound technology. Excellently illustrated it covers the rudiments and development of motion picture technology very effectively. Ironically, it implies that anyone who studies the theory and esthetics of cinema cannot really get by without a fairly sophisticated understanding of the technology. Although the chapter appears comprehensive, it is not. But it does provide much of what is necessary for the non-technical film person.

One of the more controversial sections of the book is the chapter on the *Shape of Film History*. Monaco not only traces the obvious historical paths of development, he delineates some of the more poignant conflicts and antagonisms that have, and still, agitate the milieu of narrative film—economics vs. politics, realism vs. expressionism, genre vs. auteur. In taking sides he shows an obvious preference for auteur-made films. He rejects many of the Hollywood studio "supervised" films, favoring Hitchcock and Welles for independence as well as their product. In the process, he ignores many in the past, acknowledging John Ford as a director of westerns but never mentioning him as the director of *Grapes of Wrath*. He cites Capra for *It's a Wonderful Life* and mentions the *Why We Fight* Series, but he disregards the many other films by him.

Perhaps one of the minor drawbacks of this book is the fact that it gives a sense of breadth and expanse. In reality, it is a well-written series of essays that are somewhat limited, even though they describe film's art, technology, language, history and theory. That is all they describe and they do it in a relatively circumscribed way.



Monaco seems reluctant to relate narrative film to the real world. He describes *Dr. Strangelove* as "a superb satire of the cold-war mentality," disregarding the fact that it was finished right after the Cuban missile crisis. A *Space Odyssey* "is a masterful blending of cinematography with scientific and religious theory." We should at least ask the question, would this film have had any impact at all if it were not produced in the space age?

In the appendix, Monaco lists a chronology of film and media events. For 1963 he lists two events: Kubrick's *Dr. Strangelove* and the founding of the Swedish Film Institute. There is no mention of the Kennedy assassination and the Ruby assassination on television. 1968 lists a host of things including TV coverage of Chicago riots, Laugh-In, Kubrick's *2001*, but no mention of man circling the moon seen on television. In fact, there is no mention of man's trip to the moon and his return to earth.

Despite some of the drawbacks mentioned above, if you are a serious film student, a film professional, or someone who would just like to expand your knowledge of the media, put James Monaco's book on your recommended list.

F. H. Stein has produced and directed over sixty documentary films and over one hundred video taped television programs during the last 25 years.

Popular Culture Analyzed

Cultural Correspondence, issue number 4 on *Television*, is an essential collection of broadcast criticism and reviews, going beyond the journalistic loyalties to the status quo that dominate the field. *Cultural Correspondence* is a quarterly out of the Dorrwar Bookstore in Providence, Rhode Island. It describes itself as working toward an "understanding of the latent revolutionary potential of popular culture." Issue number 5 focused on the theme of underground comics and included a history of *Arcade* and statements from R.

Crumb and others that stand as the most thoughtful consideration of the comix and their relationship to the movements of the 60's and the needs of the 70's.

The issue on *Television* includes a critical analysis of TV news, a history and explanation of the success of the Phil Silvers-Nat Hiken *Sgt. Bilko* series, a comparison of the different overall images created by the three networks, a chronicle of Aaron Spelling's shows from *Mod Squad* to *Starsky and Hutch*, and the best piece, *Prime Time Jesus*, that traces the changes that the upward mobility of TV has brought to evangelicism.

All issues include short and long reviews of current shows. Issue #4 has substantial reviews of *Who's Got Cool*, three episodes from *Visions*, local TV in the South, *All in the Family*, *Mary Hartman, Kahn* (and its roots in *Charlie Chan*), football, and the Olympics.

As a whole the articles concentrate on the social and political significance of TV with a literary analysis of the shows, a concern for plot, character, subtext, generally what the show is about and who benefits from its broadcast. There is virtually no concern with production techniques, visual, audio images, editing, etc.

You'll Never Get Rich took first place in the ratings away from Milton Berle who had been at the top for eight years. In this article, Danny Czystrom sees the attraction of the show in its rebellious qualities, its emphasis on gambling as a rejection of the work ethic, and its "burlesque of authority, particularly in that most disciplined of institutions, the army."

The expectation that is behind all the articles in the magazine, is that people aren't stupid because they watch TV. The article also gets at the strengths of *Bilko* in the legacy from Vaudeville, the Preston Sturges casting of a sea of character actors whose faces—remember Doberman—were enough to get a laugh on their own, and the underlying power in overlapping dialog and double takes.

The *Prime Time Jesus* piece by Michael E. Starr argues that TV evangelism "has ascended into the middle-class" from hands-on-healing (Oral Roberts) and a denunciation of the U.S. as a hell-hole-wrecked-vessel (Billy Graham) to "soft spoken prime time variety show(s)" and a more optimistic message supporting the U.S. foreign mission: "hit em hard for Jesus" and

mixing the "techniques of Lawrence Welk and Monty Hall." The author works through all the characters who are prominent in TV religion, going back to Fulton Sheen through Kathryn Kuhlman, Morris Cerullo, Rev. Ike, Cecil Todd, all who have made themselves over for TV, secularized their message, and promise "rapture with Pat Boone, Johnny Cash, and the World Action Singers."

The article is full historically but does not present more than a hint at the economic scope of religious programming: the Oral Roberts TV studios that are as lavish as any network's; the stations owned; the audience demographics; or the connection to the "right-to-life" and anti-ERA organizing.

The story on Spelling productions is in the same vein. It argues that *Mod Squad* was a creation of the 60's that went beyond the Jack Webb successes to co-opt anti-establishment audiences. In the shows that followed the formula was continued—children trying to do good with a strong father to keep them in line. The *Rookies* took this theme to a small town, *SWAT* into urban America, *Charlie's Angels*, and finally *Starsky and Hutch* in which the children have become father-authority figures themselves, and the plain clothes have become their uniform.

All the articles are aware of TV as a flow, and keep a clear balance between appreciating the differences in programming and following the bouncing ball. The article on network style takes the familiar CBS-the father and ABC-the son argument through detailed examples and comes up with an interesting analysis of NBC's current failure to establish a clear image, in spite of its innovative history.

This point of view that sees overall effect as more important than individual programming comes out fully in Todd Gitlin's piece on the news.

Gitlin outlines the "media's interest in social stability." He discusses the vocabulary of reporters, referring, in a reverberating example, to Dan Rather's description of FBI burglaries having begun in the thirties and reached their peak, quoting Rather, "during the civil disturbances of the sixties." In this example, Rather is defining political opposition "with obvious, unwelcome connotations. The black and student opposition movements of the sixties, which would seem quite different if they were

called 'movements for peace and justice,' or some such, were reduced to 'disturbances,' nasty little things."

This look at vocabulary is just the introduction to an analysis of the methods of objectivity of mass media news. Using their treatment of movements, including Black power, women's rights, demonstrations against the Concorde, he explores exploitation and distortion, polarization and the emphasis on dramatic visuals and slogans over work, theory, and organization, and finally outright omission such as the black-out on the Bicentennial demonstration in Philadelphia (50,000) and an anti-Kissinger demonstration in Sweden (15,000). Gitlin connects omission to the networks' renunciation of live coverage, feared in the '67 Pentagon demonstration, and let loose for the last time in Chicago '68 after which the Kerner Commission called for "'self-imposed' limits on TV coverage of 'civil disorders.'"

—Larry Kirkman

Cultural Correspondence is available at \$5 a year, 4 issues, from Dorrwar Bookstore, 244 Thayer St., Providence, R.I. 02906. Single issues, \$1.50.

China TV, Left Face, Brush Study, and 60 Minutes

46,000 programs, 15,000 hours, were produced in 1977 by the 700 "business and non-profit organizations" surveyed by Judith and Douglas Brush and reported in their book, *Private Television Communications: An Awakening Giant*, published by the Industrial Television Association, ITVA.

Since the Brushes' first survey in 1973, this area of non-broadcast production has doubled in market size to a half-million dollars in 1977, with \$1.6 million predicted by 1980.

Programming is typically color, distributed on cassette to an average of 18 locations. The content of these programs includes employee training, reports taped on location for management use, and public relations.

There is a trend toward the use of video by organizations with as few as 10,000 employees, smaller than the AT&T's and A&P's whose use gets regular news attention. In their '73 study the users were major industries who were making heavy capital investments in big studio, centralized facilities.

In the 1977 survey, the fastest area of growth was found in smaller companies, service oriented, "people-intensive," such as banking, insurance. These companies are putting their money into portable video, ENG equipment, and taking their studio to the location. The field has come up with its own term to describe this location production, "DVP," or decentralized program production.

In an article in the December, *Technical Photography*, the Brushes argue that "with the computer, television is going where the user is, instead of the other way around." Shooting single camera film style, and using new generations of automated video editors, industrial video is bringing "TV to the talent," and abandoning the studio investment.

Telecommunications Equipment: A Market Assessment for the Peoples Republic of China is a report done by the U.S. Department of Commerce and its Domestic and International Business Administration. The report provides some information about what is happening in television in China though its written from a definite Commerce department perspective. Much of the technical information was taken from brochures at the Canton Trade Fair.

Most television studio/production equipment in China is imported, though some items such as videotape are being produced experimentally. There are presently about 500,000 television sets in China, and an estimated 100,000 new sets per year. (Most of them are manufactured in Shanghai).

The design of the Chinese telecommunications system is still undecided, so there has been no decision whether to go with PAL or SEC AM, though PAL is presently being used in China. Though many of the technical aspects of the Chinese system have not been decided China is very clear on the importance of television as an educational and political instrument. One article cited, titled *Give Full Play to the Fighting Role of Socialist Television*, stated that "a brand new phase of vigorous development has emerged in China's socialist television undertaking following the great proletarian cultural revolution."

The report can be ordered for \$1.70 from the Government Printing Office Washington, D.C. 20402.

Cineaste magazine has put out *Left Face* a source book listing radical magazines, presses, and collectives actively involved in the arts. The 16 page pamphlet includes descriptions of the editorial policies and formats of thirty-one U.S. and Canadian cultural publications. Each selection also includes a self-description written by the publication under review. Current addresses, subscription rates, and cost of sample copies are included. Many film but no video, access, or cable publications make the list.

Copies are available at \$1.50 from *Cineaste*, 333 Sixth Avenue, NY, NY 10014.

Pocket Phones: Picking up where CB and land-mobile radio leave off, Ma Bell and Motorola, among others, would like to use a sizeable chunk of the spectrum for the ultimate in personal communications: portable telephones. Present

technology would require too much space, but a computer-trafficked "cellular" system, which makes maximum use of frequencies could change that.

Whether it is in the public interest is another question, but the definitive study of the question is now available: *Communications for Mobile Society*, a technology assessment under the direction of Dr. Raymond Bowers of Cornell has been three years in the making. (From: Cornell Program on Science, Technology and Society. 531 pp. Soon to be published commercially by Sage Publications, Beverly Hills, CA).

Read New Yorker TV columnist Michael Arlen's carefully constructed critique of the journalistic value of CBS's *60 Minutes* in his recent *The Air* (November 28). His critique focuses on the actual content of the Rock Springs, Wyoming investigation broadcast in two episodes.

But, his most interesting arguments concern the role of the interviewer, the method of questioning, and the creation of a false drama that obscures the context of the subjects and evokes a fetishism for the facts in the Jack Webb mold, leading questions with yes or no answers, every subject a hostile witness. Another example of this same tone was shamefully displayed in *60 Minutes'* December 26 segment on pianist Vladimir Horowitz.

Smogman Comix, a kind of cross between R. Crumb and Flash Gordon, has been coming out of Glendale artist John T. Ryan's studio all year. It's great! \$7 U.S. subscription, from: Ryan Environmental Enterprises, 1434 E. California Ave., Glendale, CA 91206

"The Independent and Public Broadcasting" in the current *Public Telecommunications Review* by filmmaker Joel Levitch does an excellent job in sketching the problems that some independents have encountered trying to get their work on the public network. PTR, 1346 Connecticut Ave, NW, Washington, D.C. 20036

Bensinger's Video Guide

The Video Guide by Charles Bensinger. \$11.95. Video Info Publications, P.O. Box 1507, Santa Barbara, CA 93102

"Video is a decentralization of media," begins Charlie Bensinger in his recently released handbook, *The Video Guide*. With an orientation towards the educational/industrial video user, Bensinger begins his book with a concise historical overview of small format video, its use and its evolving technology. This introduction and other references throughout *The Video Guide*, reflect Bensinger's own roots in the California community video scene. It is a valuable perspective for this type of book.

Though now we are beginning to see a flood of new publications on the subject of video, ranging from the Knowledge Industry series to the home video magazines, Bensinger's video manual fills a gap in providing a general evaluation for producers and operators (rather than for technicians or consumers) of state-of-the-art, small-format video systems.

His earlier handbook, titled *Peter's Guide to Video Recording*, was one of the few useful 1/2" video primers available a few years ago. This time,

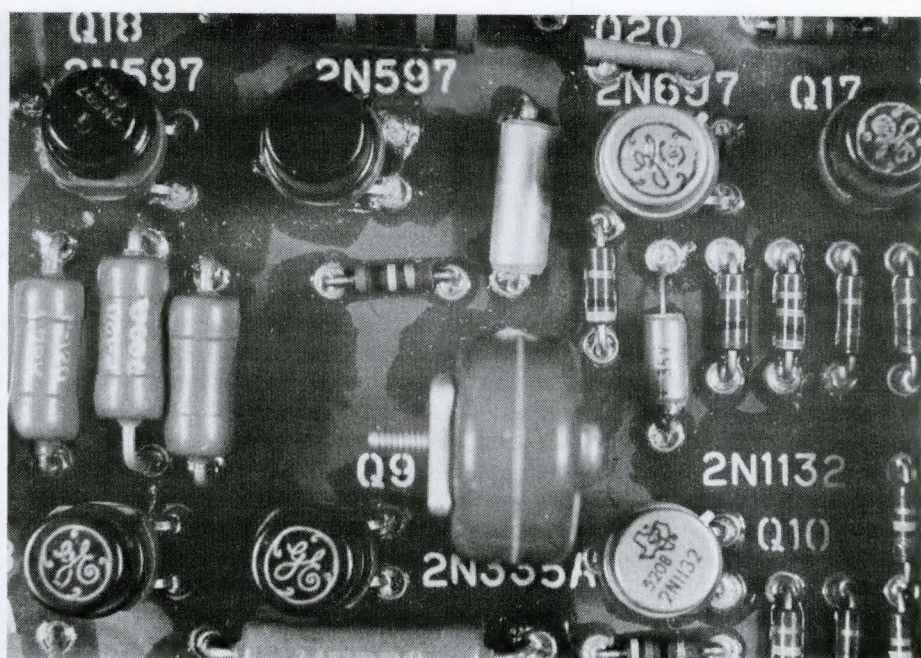


Photo: Leonard Rizzi

working independently, Bensinger incorporates the fruits of several years of small-format video frustrations and lessons in a necessarily dated guidebook.

The Video Guide's strongest areas are: systems descriptions, looking into 1/2", 3/4", and 1" formats as whole systems for recording and playback; and, the detail given to such technical factors as signal-to-noise ratios, camera tubes, color quality requirements, dropout compensators, etc. More information is needed on the connections between variances in lighting and audio factors and the overall performance of a video system or specific piece of hardware.

Bensinger's *Video Guide* provides us with a compilation of the specification sheets of a wide range of video equipment, which is in itself a useful service. But, it also gives us some necessary translations of this information (the book contains a ten page glossary) plus occasional pieces of advice, based on valuable video hearsay.

In summary, this is not a sophisticated technical manual, (the engineer would skim through in a few minutes) but is required reading for ITV coordinators, producers, students and others who think content first and then proceed to the technology.

—Victoria Costello

Filing as docket #21049, before the FCC, the Emergency Civil Liberties Foundation has taken up the cause of independent producers limited access to the commercial TV networks' news departments. In addition to the excellent case made for the legal basis of diversity, the brief, written by Eric Lieberman, also asks the commission to require more public affairs and news from stations and networks. No action yet, despite the June 1977 filing date. (From: Lieberman, 30 E. 42, NY NY 10017)

CALENDAR

April 15-18, 1978: Health Education Media Association (HEMA) Annual Conference, Kansas City, Mo.

March 8-11, 1978: Conference on visual anthropology. COVA, Dept. of Anthropology, Temple Univ., Philadelphia, Pa. 19122

February, 1978: Conference on the future of video art. Walnut Street Theatre Film/Video Center, 825 Walnut Street, Philadelphia, Pa. 19107. (215) 574-3580

February 20, 1978: Conference on children's films. Contact: Media Center for Children, 43 West 61st, NY, NY, 10023. (212) 757-1850.

February 4, 1978: Northeast Regional Conference of the National Federation of Local Cable Programmers (NFLCP) in Boston. Contact: Sallie Fischer, NFLCP Northeast Region Coordinator, Box 75, Derby Ct. 06418.

Feb. 19: Lance Wisniewski. Video documentary on the rehabilitation of bald eagles. Sun. 8:00 pm. Anthology Film Archives.

Feb. 25: Antonio Muntadas. "Transfer," "Snowflake," (1976) "Subjectivity" 1977 Anthology Film Archives

April 9-12, 1978: National Association of Broadcasters (NAB) Annual Convention, Las Vegas, Nevada.

SURVIVAL

Brown, CA. Art, Jobs and Deadlines

1976 business support for the arts doubled from 1970, up to \$221 million according to survey by Business Committee for the Arts (BCA). Claiming the biggest piece of the pie were public radio and television, which got 19¢ of every donated dollar. Way at the bottom of the list for corporate giving were individual artists, films on cultural matters, and crafts. Art has also increased as a percentage of total corporate giving, up from 8.9 percent in 1970 to 11.6 percent in 1976. Copies of the survey available from: BCA, 1700 Broadway, New York City 10019.

CPB, PBS, NRP and NAEB have organized a personnel service for matching people with jobs in the public broadcasting field. Called PACT, and administered by NAEB, the service provides a regional job bank, personnel roster, bulletin, and job counseling. The free service is aimed particularly at women and minorities, and lists a variety of jobs—from entry level to professional. Contact PACT, NAEB, 1346 Connecticut Avenue, NW, Washington DC 20036.

With help from Gov. Jerry Brown and state legislators who support the arts, the California Arts Council's 1978 budget is \$3.5 million, up from \$205,923 five years ago. The Council, composed of working artists rather than arts Patrons, has been accused of playing favorites and not supporting mainline art forms like opera and symphony. Nevertheless, the Council promises to be one of the most innovative government arts funding programs in the nation, pressing for more community-based, politically-inspired programs. While artists and legislators have mixed feelings about the relatively new Council, no one is complaining about increased funds. However, only 13 percent of grant money can be used by groups for general support, and a mere 9 percent is available for individual artists.

Sony says it will have a prototype of a new computerized editing system for one inch and a vertical time code generator, now in the field testing stage with CBS. It will generate a time code even in stop frame and slow motion modes. The price is in the area of \$6000 and prototypes should be at NAB.

The 1977-78 Bread Game poster published by the Museums Collaborative is again available for those who would like to keep posted on federal funding deadlines for museums, zoos, botanical gardens, historical societies and for dance, music, theatre, crafts, film, video and architecture programs.

Individual copies may be purchased from Museums Collaborative, Inc. 655 Madison Avenue, NY, NY 10021. Do not send cash. Bulk orders will be billed and the cost goes down. 11-25 copies—2.00; 26-50—1.00; 51-100—.70; 100 on—.60. Telephone (212) 688-9808

Media Grantees

\$189,000 from the Bush Foundation to The Chicago Educational Television Association to complete program series Look At Me, on parenting and child development.

\$25,000 from the Kazanjian Economics Foundation to Saint Louis Educational Television Commission, for a series of programs on basic economics for primary level children.

\$5,000 from the Gerbode Foundation to the Institute for Aesthetic Development, to develop San Francisco Bar Area Museum-Television project. The Project will bring together museums and television to produce PSA's, mini-programs, and museum magazine series as a national model of collaboration.

\$11,310 from the Gannett Newspaper Foundation to Howard University, School of Communications, to purchase editing-production equipment for electronic journalism laboratory.

\$25,000 from the Edward E. Ford Foundation to the Fund for Theatre and Film, NYC for audiovisual presentations dealing with occupational health and safety for use by workers, unions, and plant management.

\$25,000 from the Robert Wood Johnson Foundation to Children's Television Workshop for development of teaching materials in dental health.

\$10,000 from the Davis Foundation to KQEE to underwrite early research and development costs of new religious series for public television. Series title: In Quest of the Sacred.

\$284,500 from the Spencer Foundation to The University of Kansas, Lawrence for study of the effects of formal features of children's television programs on development of attention, comprehension, and behavior.

\$50,000 from the Polaroid foundation to the American-South African Study and Educational Trust, Johannesburg for charitable, cultural, educational, or medical causes in South Africa.

\$529,505 from the Kellogg Foundation to Jackson State University, Jackson, MS to strengthen programs in telecommunications and film.

\$160,000 from the Ford Foundation to the United Church of Christ, Office of Communications to reduce racial and sex discrimination in television and radio programming and employment.

\$20,000 from the Sloan Foundation to Community Television of Southern California toward support of research and development phase of public television series on astronomy called Man and the Cosmos.

\$100,000 from the Sloan Foundation to Public Communication Foundation for North Texas, toward production of public television series on free enterprise economic system called The American Gift.



Speak out moderator, John Lippman interviews a citizen at Seattle's Pike Place market.

"Speak Out" in Seattle

By ERIC CARLSON

The camera frames the figure of an elderly man in working clothes. It moves in slowly as he begins to speak nervously in a heavy, Scandinavian accent. People come and go in the background. He is 69 years old, we learn, and he's ready to retire. He's got a little dairy farm he's worked for forty years and he wants to subdivide it now, suburban style, so he can finally relax a little. But the county won't allow his project because of some recent land use regulations. The story unravels in his own words with minimal questions asked by the reporter. It looks like it might be the beginning of a public affairs program on land use planning or perhaps a segue from a network special on aging but in fact it's just one, five minute unedited portion of a new, half hour public affairs programming concept called *Speak Out*, which is being aired by Seattle/Tacoma's independent commercial station, KSTW.

Speak Out Features mobile production and a public access format and has been on the air weekly, Sundays during prime time since last Fall. John Lippman, news director for KSTW and producer/moderator of *Speak Out*, conceived the program as a mobile public forum, reaching a diverse group of people, and so far he has succeeded in attaining his objectives. Shows have been shot at locations including a county fair, and Seattle's Pike Place Market, and his guests/speakers have ranged from gum snapping girls living in a foster home, and farmers like the dairyman caught up in bureaucracy to bureaucrats like a local school superintendent talking about taxes—all presenting themselves and their views with little prompting from Lippman who has also scrupulously refrained from editing their natural hesitations in speaking when each show is aired.

What brought a program like *Speak Out* to prime time television? According to Lippman, when Gaylord Broadcasting

was negotiating for the purchase of the station about two years ago market research and general ascertainment interviews for the FCC indicated substantial support for public access style programming. Lippman had already done some research on public access and was favorably inclined in that direction himself so when the FCC required 2 hours of prime time public affairs programming as a condition for the purchase of the station the die was cast. The clincher for *Speak Out's* format came when the station finally acquired a mini mobile production unit earlier this year, allowing the remote set ups, which Lippman had been looking for all along.

Lippman has been pleased with the program so far but has hopes for more ambitious shows in the near future, including a program originating from the Washington State Penitentiary. Now that public access programming on cable TV is no longer required programs like *Speak Out* may be the best and perhaps only opportunity for citizens to be seen and heard in electronic media without the inevitable editorial brackets which seem to come with conventional commercial news and public affairs programming.

Eric Carlson is an architect in Seattle and a video consultant in environmental design.

"Structural Realism"

By SARAH ORDOVER

A video documentary which opened the New Filmmakers series at the Whitney museum is now on view at The Kitchen in New York. *Revolve*, produced by Nancy Holt, is an interview with Dennis Wheeler, a video artist and leukemia victim who has managed to overcome his illness.

Using Wheeler's studio in Vancouver, Holt succeeds in her attempt to bring this interview out of the forum of documentary and into the realm of art. Verite in approach, *Revolve's* form is what David Stern, the Kitchen's director, calls "structural realism." Through repetition in editing, different gestures, phrases and sentences are emphasized. By repeating a moment, as a composer would a refrain, Holt is able to underscore thematic ideas from Wheeler's conversation.

Revolve is a video portrait, a look at death through one man's eyes. In an hour and ten minutes, Wheeler describes his comprehensions of death, both when he was at its edge and now, as a man with leukemia who must deal with death everyday. His metaphors continually change, describing his feeling of dying as a pancake on a clothesline, the light from a desk lamp, or a dark undifferentiated form. Wheeler asks that his audience "meditate through points of view...the death experience in its pain and orgasm."

Beyond the pictures of death Wheeler draws for us, are the pictures of Wheeler Ms. Holt supplies. She also asks us to meditate through points of view, and Wheeler's dialogue is the perfect vehicle for her artistry. *Revolve* derives its name from the essence of Wheeler's experience, found in his attitude towards death as an inevitable part of a larger cycle. Using three cameras mounted on tripods, the portrait of Wheeler slowly revolves in concert with the circular pattern of his thoughts. There are three primary shot positions, a front desk shot, a profile shot and an over the shoulder shot, usually of Wheeler's hands or the typewriter he is sitting behind. All three cameras recorded the entire interview from these triangular positions and the tapes were later edited into a whole.

This is the second video piece by Ms. Holt, a recent convert from film. Her first video production, *Underscan*, also available at the Kitchen, is a kinostatic journey into the life of her Aunt Ethel, an elderly widow who lived in New Bedford, Mass. Excerpts from the aunt's letters are read while a montage of photographs depicting Aunt Ethel's environs are underscanned by the camera. The difference in sophistication between the two pieces is outstandingly visible. *Underscan*, 8 minutes long, is a relatively insignificant work but viewed along with *Revolve*, gives you tremendous insight into her progress as a video artist.

Revolve was made possible through a multitude of grants, including the Kitchen, National Endowment for the Arts, the Sonnabend Gallery, and the New York State Council for the Arts.

JUMP CUT

providing in-depth analyses of new films

JUMP CUT

developing a radical film criticism

JUMP CUT

6 issues \$4.00

po box 865

berkeley ca 94701

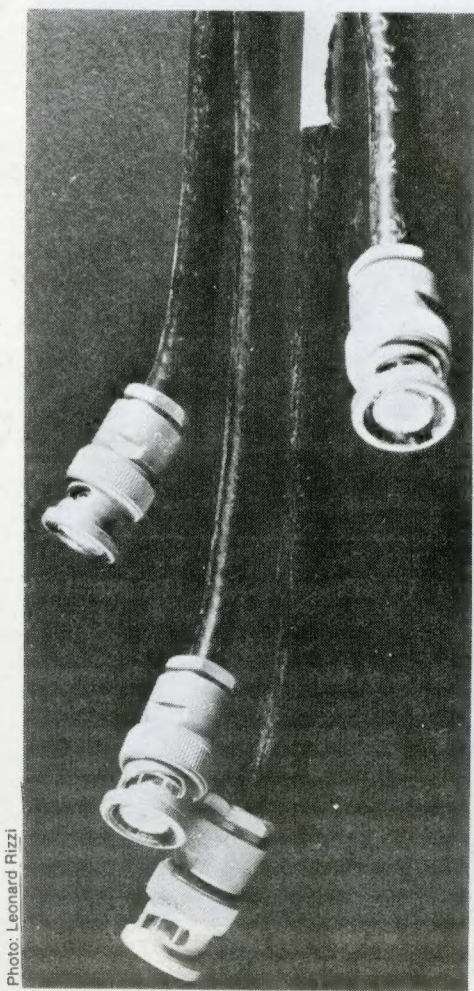


Photo: Leonard Rizzi

DEPARTMENTS

Trends and key stories in Social Service, Citizen Action, Art, Broadcast TV, Technology, and History.

HISTORY

Refinanced, Relocated and Bought Out. Sarnoff Pays

Conclusion to the Philo T. Farnsworth story

By PAUL SCHATZKIN

By 1937, the extended Farnsworth family—the “lab gang” Philo had built—had turned “mankind’s most fanciful dream into a startling reality.” The collective spirit that motivated their work was shattered when company president and financier Jess McCargar fired everyone after arguing with Philo about reducing expenses in the laboratory. The dream of television was a reality, but as long as Jess McCargar remained in control of the finances, Philo Farnsworth’s personal dream of creating a self-sustaining research lab by licensing patents instead of selling them seem doomed.

Simply stated, Farnsworth wanted to be in the *inventing* business. McCargar seemed to think that they were only in the *television* business. After 10 years of promises and predictions, McCargar, who was getting on in years, began to wonder if his investments in television would pay off in his own lifetime. As time passed, Jess’s outlook soured to the point that his influence became an unpredictable threat to the entire enterprise.

The emotional stress that accompanied these issues peaked during the summer of 1937, when a group of Farnsworth intimates convened a special meeting in the living room of the Farnsworth’s home on Crescham Valley Road outside Philadelphia.

The meeting was arranged to discuss alternatives to the company’s current method of raising money, which had remained basically unchanged since 1929 when McCargar began selling stock in the venture to meet lab expenses. Now the assemblage thought it was time to obtain more substantial underwriting for the company, both to improve its financial standing and to minimize McCargar’s destructive influence.

McCargar understood that the meeting was a challenge to his leadership and stayed away to avoid a confrontation. This tacit acknowledgment of his slipping power confirmed what had been happening for years. For, although he had been titular head of the company during the 30s, financial support for Farnsworth’s research had increasingly been raised on Wall Street. Philo’s first backer, George Everson, enlisted the aid of a former associate, Hugh Knowlton, who was now with Kuhn, Loeb, one of the most established Wall Street investment firms.

Once Kuhn, Loeb became involved in raising funds to support Farnsworth’s research, the firm and the investors they represented began to acquire significant equity in the venture. By the spring of 1937, when he fired the entire lab

gang, Jess McCargar was serving at the pleasure of a Board of Directors that he had not hand-picked. This shift in the power behind the company carried even more serious implications for Philo, who was still clinging to the last remnants of his dream that success in television would pave the way for success in whatever line of research he chose to follow in the future.

In the past, most of Farnsworth’s problems erupted in the form of confrontations with Jess or George Everson, or a Board of Directors largely under their control. By the time the Board of Directors came to meet in Farnsworth’s living room, the focus of power in the company was not so readily identifiable. Instead of dealing with just George and

Jess, Farnsworth was forced to contend with unfamiliar faces. He knew that behind each face was a man with his own ideas about how Farnsworth should run his business.

Farnsworth did everything in his power to make the Board understand his point of view, but the Wall Street types were adamant about following a more predictable and conventional approach for securing the company’s profitability. By dinner the ingredients of a serious proposal started taking shape. Using the services of Kuhn, Loeb, to arrange the necessary financing, the Farnsworth enterprise would acquire a factory and engage in the manufacture and sale of radios until the market was ready for television.

Television up for grabs

Farnsworth’s was not the only company that was trying to fortify its position in the industry as the final battles over television approached. The list of entries into the television sweepstakes grew longer each day as companies like Zenith, DuMont, Philco, Crosly, Emerson and others began circling the territory to stake out claims.

As the growth of the new medium accelerated, the focus of interest began to shift from the research labs in New York and Philadelphia to the political corridors of Washington, D.C., where the recently formed Federal Communications Commission was expected to orchestrate the chaos by setting universal signal standards and clearing space in the electromagnetic spectrum for television.

A single set of specifications for all broadcasts, covering scan rates, frame rates, and the like, was essential for all broadcasts in a given area to be compatible with all receivers. Without such standards it would have been necessary to own a different receiver set for every station a viewer wanted to receive. While standards seemed inevitable, it would be difficult to exploit the invention commercially until they were adopted.

The FCC, however, moved cautiously, realizing that once standards were adopted, the industry would have to live with them for decades, if not centuries, to come. In addition, the FCC was forced to contend with numerous factions that opposed the momentum that television was gaining. Radio broad-



Philo and his earliest model are displayed on a 40s production model Farnsworth Television, now owned by the author.

casters and set manufacturers, joined forces in an alliance with the movie industry and lobbied to stall TV's progress in Congress and the FCC.

In addition to signal standards, the FCC was responsible for locating television within the electromagnetic spectrum. Because it utilizes extremely high frequencies and much greater bandwidth in the spectrum, television broadcasting threatened to gobble up an inordinate amount of finite spectrum space; one TV channel would need as much as a dozen radio channels, thus limiting the number of available channels in any geographic region. Even more spectrum space would be required, it first seemed, for radio relay of TV signals if a national TV network were to be established along the lines of existing radio networks.

Without question the company that was in the strongest position to capitalize on television was the Radio Corporation of America, whose patent domination in the field of radio transmitting and receiving was almost impregnable. All throughout the 20s and 30s it was virtually impossible to manufacture any kind of radio apparatus without paying royalties on RCA's patents, which included most elements of vacuum tube technology. Those that attempted to infringe on RCA's patents would have to contend with the company's formidable legal department, which more often than not put the competition out of business.

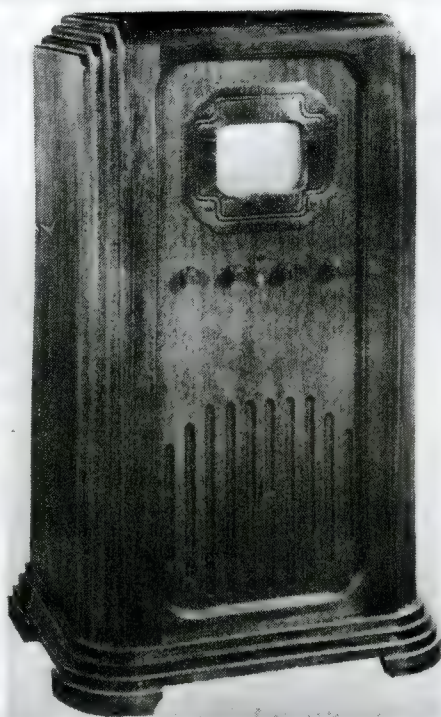
By reserving for itself the right to license or not license whomever they chose, RCA placed itself in the enviable position of determining who and how big its competition would be.

As a result, most observers assumed during the 30s that RCA would extend its domination to the new field of television, into which company president David Sarnoff had already poured millions.

Besides RCA, the American Telephone and Telegraph Company (AT&T) was the only other serious contender. AT&T staked out its claim in 1935, when Bell Labs introduced a wired solution to the problem of sending television transmission from city to city. Their invention was called a "coaxial cable" owing to the fact that one conductor was threaded thru the center of a flexible copper tube. With this development, AT&T placed itself in perfect position to give itself the job of wiring together television networks. The FCC tentatively gave AT&T permission to experiment with their cable, and one was strung almost immediately from New York to Philadelphia to begin testing. In the meantime, the FCC opened an inquiry to make certain that AT&T was not about to create another communications monopoly.

Such investigations were familiar territory to AT&T, who along with RCA, GE and Westinghouse, had experienced previous governmental inquiries into their affairs. The inquiries revealed that these giant companies entered into a series of secret agreements during the 1920's upon which the entire structure of the communications business became predicated.

These agreements were ostensibly broad patent cross-licenses. Each company granted the others the use of their vast patent portfolios. Stipulations within the agreements had even greater ramifications, for they established specific restrictions on how each company could use their part of the patent pool. Thus AT&T was able to use all of RCA's patents so long as AT&T stayed out of the radio business, and RCA was



A 1938 prototype, built to prove the practicality of TV manufacturing, was never actually mass produced.

was sliced up and nailed down, television was up for grabs. Whoever got there first would call the shots.

Updating the cross-licenses to include television was essential to David Sarnoff's plan for RCA to extend its domination of radio communications into the field of television. With such patent control at its command, RCA would have a lock on virtually the entire electromagnetic spectrum: it would have been impossible to transmit or receive any kind of information via the spectrum without employing some sort of RCA-covered device. RCA would truly become THE Radio Corporation and David Sarnoff would become the undisputed Emperor of the Airwaves.

Only one man stood between David Sarnoff and his dreams of an ethereal empire—Philo Farnsworth. Sarnoff knew that in order to add television to the existing cross-licenses, each side would have to have patents central to the new art to exchange. AT&T was well prepared to begin negotiating around its contribution, the coaxial cable, and

Despite the fact that the mighty RCA had been challenging Farnsworth's patents for years, the RCA portfolio covering TV camera tubes lay in ruins. After nearly 15 years of consideration the U.S. Patent Office had still not issued a patent for the iconoscope on the basis of Vladimir Zworykin's 1923 patent application. In numerous decisions the Patent office held that the tube disclosed in 1923 and the iconoscope were not the same tube. Furthermore, engineers who had been working with the iconoscope in the field reported that the tube was a nightmare to use. The signal was noisy and needed a lot of filtering. Shading the picture never ceased to be a source of anguish. The RCA research philosophy—if they couldn't own an invention, they would engineer their way around it—was finally coming back to haunt them.

Sometime early in 1937, some of the men working at the RCA Labs in Camden gave the boss something new and exciting he could report to the increasingly nervous RCA Board of Directors. The engineers had redesigned the iconoscope in such a way that it would soon be capable of producing a much sharper, cleaner picture than any of its predecessors. The legal department assured Sarnoff that the development was completely original to RCA, and moved quickly to file patents. Meanwhile, the trademarks department came up with a name for the new tube: the Image Orthicon. His confidence restored, David Sarnoff told the RCA Board of Directors that he had chosen a date for launching commercial television service—at the New York World's Fair in April, 1939.

Caught in the crossfire

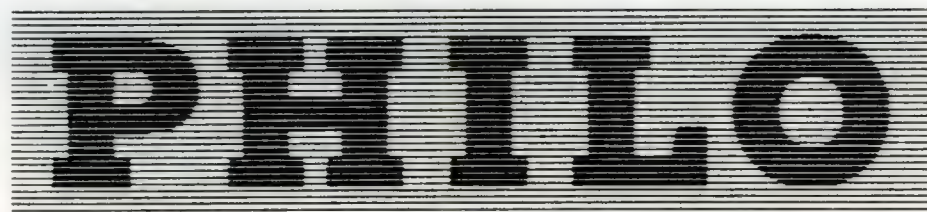
Philo Farnsworth stepped directly into the crossfire between the giants in 1937 when the Federal Communications Commission invited him to express his opinions on the future of television. Farnsworth's appearance was scheduled as part of the ongoing investigation into the growth of monopolies in the communications business. As usual RCA and AT&T were the targets of most of the Commission's concern. Specifically, the FCC was trying to determine if AT&T was employing monopolistic practices by its apparent failure to issue any licenses for the use of the coaxial cable. It seemed that AT&T was reserving use of the cable for itself and this would clearly be restraint of trade.

Farnsworth had appeared before the FCC on several previous occasions, as when he applied for a special license to conduct on-the-air experiments with his invention. Philo felt he had been treated fairly by the commission in the past, and was at ease.

Unknown to Farnsworth, AT&T President Walter S. Gifford sat quietly in the hearing room that day, listening intently as the Commissioners began to question Farnsworth about his experiences in obtaining licenses for his patents.

Philo told them that he did not hold a license for use of the AT&T coaxial cable, nor had he tried to obtain one.

At this point Gifford, hoping to prove a point in front of the Commission, rose to his feet, interrupting the next question, and introduced himself. He then asked Farnsworth if he would care to enter into a cross-license agreement with AT&T. Farnsworth, a bit stunned, responded that, of course, he would welcome an exchange of patents with AT&T. "Then see me after you are through here," Gifford said, as he sat down, leaving the rest of the room in silence.

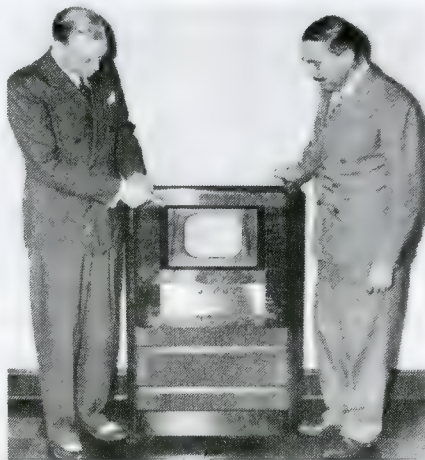


As the doors of the new Farnsworth Television and Radio Corporation opened in Fort Wayne, Indiana, the staff assembled in April, 1939.

able to use all of AT&T's patents so long as RCA stayed out of the telephone business. Conversely, RCA was assured dominance of the radio business as long as AT&T received all the long-lines business from wiring together RCA's radio networks.

These cross-license agreements became notorious during the early 1930s as "The Radio Trust." The original cross-licenses were modified—after the threat of anti-trust proceedings—in the "consent decree of 1932," which essentially allowed RCA and AT&T to stick to the same terms, albeit couched in less monopolistic terminology. The basic structure of the early cross-license agreements still stands today.

However, even after the consent decree of 1932 was signed, the agreements omitted one important consideration: television. The AT&T/RCA cross-licenses covered audio transmissions only. There were no provisions at all regarding which company would use what patents in television. In other words, in a field where everything else



Former RCA executive E.A. Nicholas, TV&R's first president. At right is longtime Farnsworth backer Everson.

apparently RCA was expected to deliver its end of the bargain in the form of patents that covered the art of sending and receiving video signals. But as things stood in the middle of 1937, RCA didn't own any of those patents. They belonged to Philo Farnsworth.

Unlike RCA, which had staked its entire future on developing electronic television on its own, AT&T had nothing to lose from offering Farnsworth a cross-license, and everything to gain. By making the offer in the presence of a Commission that was investigating the company's business practices, Gifford seemed to contradict the charges of monopoly, and his clever staging cast AT&T as the champion of free enterprise.

It took more than six months for AT&T and Farnsworth to iron out the specifics of their cross-license agreement, but when the deal was finally announced, it sent shock waves through the industry.

If David Sarnoff was reading *Business Week* on August 14, 1937, he would have discovered the truth in print: The AT&T-Farnsworth deal "means that the grip which the Radio Corporation was generally assumed to have on the future of television was relaxed," because "Farnsworth now obtains access to the basic broadcasting patents. In other words, he is now able to compete with RCA on more equal terms. The road is no longer blocked should Farnsworth decide to enter manufacturing."

In effect, Farnsworth had sneaked in through the back door and raided Sarnoff's kingdom. If they wanted to, AT&T and Farnsworth could have launched commercial television themselves, and left RCA standing in the cold.

The Farnsworth deal with AT&T had immediate implications for the rest of the industry, which greeted the news as a major coup for Farnsworth. The announcement gave others the confidence to begin purchasing equipment from Farnsworth without fear that RCA would interfere with the transaction. The Columbia Broadcasting System was one of the first companies to buy Dissector tubes from Farnsworth for TV experiments they were conducting from the Chrysler Building in New York City.

All this activity was a clear signal to Sarnoff that the industry was beginning to accept Philo T. Farnsworth on his own terms. Still, Sarnoff continued to play his hand, confident that the Image Orthicon would provide his ace in the hole. Tests with the new device showed that the tube out-performed all their earliest expectations. Almost the moment the Orthicon was proven, RCA junked its research on the Iconoscope, with a quickness that suggests the only reason the Iconoscope ever was developed by Zworykin was to get around Farnsworth's patents. Having failed to accomplish this purpose, RCA moved rapidly on to something else.

Sarnoff was probably not too worried about the AT&T-Farnsworth deal until the day his lawyers informed him that they had encountered U.S. patent #2,087,683, which revealed that Philo T. Farnsworth had been issued patents that covered important features of the Orthicon design, in 1933, four years before it was discovered at the RCA labs.

The legal department initiated interference proceedings with the U.S. Patent Office over the conflicting claims but this effort met the same result as every previous RCA challenge. Priority on claims relating to the Image Orthicon tube were awarded to Farnsworth. The only ingredient on which the Patent Office would award priority to RCA was the name itself, "Image Orthicon," which RCA had registered as a trademark. So, the orthicon tube, the workhorse upon which the television industry was built in the 40s and 50s, was basically a Farnsworth invention wearing an RCA name.

By 1938 David Sarnoff had spent nearly \$10 million for research in television, but RCA was unable to obtain a single patent that was essential to the new art. On the other hand, Farnsworth's research had cost less than one million, and his portfolio controlled the art. Sarnoff was outspending Farnsworth by 10 to one, and had nothing to show for it. Such is the difference between trying to engineer an invention and inventing one.

About this time Sarnoff began to change his tune. In public addresses, he mentioned Farnsworth several times by name and acknowledged his contributions to the art of television, although always listed with other inventors, particularly Zworykin. Nevertheless, as Farnsworth's people learned about such utterances, the Wall Street grapevine confirmed their conclusion: RCA's change of heart was real. So in the early months of 1938 lawyers for Farnsworth and RCA sat down to begin negotiating the long-awaited cross licenses.

The deal began to take shape when Kuhn, Loeb learned of a plant in Fort Wayne, Indiana, that was being sold as part of the liquidation of the Capehart Company, once regarded as the most elegant name in automatic record changers. The company slid into bankruptcy when one of its most expensive mechanisms developed a habit of breaking the records it was supposed to change.

Once Capehart's creditors accepted the Farnsworth offer, other components of the deal began to fall into place, and new faces began to play an increasingly important role in Farnsworth's life. Curiously enough, many of the men who joined Farnsworth as executives of the new company were defectors from RCA. For men like E. A. Nicholas, who left a lucrative post as a marketing manager with RCA to accept the position of president in the new company, the move provided opportunities that could never exist at RCA so long as David Sarnoff remained in command.

proving something, in order to advance the theoretical base of scientific knowledge.

At the laboratory, Farnsworth engaged himself in taking a mental inventory of all the work he was doing in hopes of resuming where he left off, once things were rolling in Fort Wayne. In the meantime, he spent a good deal of time with Pem and Cliff and his wife, Lola, trout fishing in streams from the Carolinas to Maine.

Both Cliff and Pem felt that Phil needed the rest, for he had never fully regained his health since the debilitating days after his second trip to Europe in 1936. He never seemed to exhibit quite the same vitality of years before, and especially since the firing, he was tense and edgy and found it quite difficult to relax. Forever the man possessed by his work, Phil was reticent about spending so much of his time on the end of a fish pole. Still, with the realization that there was not much to do until the lab was set up in Fort Wayne he decided to take off and spend some time with his wife and family. To his pleasant surprise, he found that fishing put him in just the right frame of mind for the time, and presented an unhampered opportunity to reflect at length on what had transpired during his many years in the field of science.

It was during these fishing trips in 1938-39 that Farnsworth began seriously thinking about what should come next. After nearly 10 years of devotion to a single pursuit, his internal compass seemed to tell him that it was time to do something different.

After one of their fishing trips in the northern reaches of the Appalachian Trail, Phil and Pem stopped in Brownfield, Maine, to look in on a property that George Everson had acquired in a foreclosure deal during the depression. The house was a little run down, but Phil became instantly captivated by the place and wasted no time burning up the wires to San Francisco, asking George to sell enough of his stock so that he could buy the 80 acre farm.

In the ensuing months, the Farnsworths returned to Maine several times, and Phil began devising big plans for the place. In the back of his mind, he began building the nest in which he would begin the next phase of his life.

All the contracts and notes that would finalize the plans first outlined in Farnsworth's living room were ready to be ratified in March 1939, and comprised, in George Everson's words, "a volume somewhat thicker than the New York telephone directory."

Among other things the papers included provisions for floating \$3,000,000 worth of Farnsworth stock for the purchase of the Capehart facilities and for initial operating capital for the new corporation.

The papers were held in abeyance for weeks, while the Wall Street people waited for weak market conditions to subside before floating their issue. When the market stiffened, March 31 was set as the closing date. In the final moments before closing, everyone involved knew that the slightest last-minute failure could bring the carefully planned deal toppling down on them. When the documents were all signed, George was handed a check for \$3,000,000, and the Farnsworth Television and Radio Corporation was open for business.

The following day Hitler invaded Czechoslovakia.

Philo and Pem stayed in Maine while the Philadelphia lab was crated and hauled to Indiana. Meanwhile, new



Opening the shipping room door

It took nearly two years to hammer out the details of the deal that would put Farnsworth in the electronics manufacturing business. George Everson and other officers of the company spent most of that time in New York, working closely with Kuhn, Loeb, and other Wall Street contacts, while Philo monitored the progress from the lab in Philadelphia, where he had picked up the new work that preoccupied him when the lab gang was fired.

Though the move presented obvious risks, Nicholas felt that they were justified, since working with Farnsworth presented him with a chance to build from the ground up an enterprise that could conceivably rival his former employer.

As much as ironing out the business affairs of his company was now the province of financiers, so too the remaining technical chores were the province of engineers and product designers. As an inventor, Farnsworth thrived on the more rarefied atmosphere of conceptual research, where an invention is not so much an end in itself as a way of

pages in the history of television were written every day, and public interest in the imminent arrival of the new medium continued to intensify.

The 1939 World's Fair

In a display that was designed both to capitalize on the public's curiosity and lend historical credence to the event, David Sarnoff arrived at the opening of the New York World's Fair on April 30, 1939. His entourage included Franklin D. Roosevelt, who became the first President of the United States to appear on television in a ceremony staged especially for the benefit of RCA's television cameras.

In his opening remarks, Sarnoff announced the opening of an epoch: "Now we add sight to sound," he proclaimed, though there was no mention of any of the individuals who were directly responsible for that accomplishment. The event was televised to an audience on the fairgrounds, and was broadcast to a handful of receivers in the New York area.

Later that week, television receivers went on sale in limited quantities at a few department stores in New York. These first commercial sets used the 441 line/30 frame standard proposed to the FCC by the Radio Manufacturers Association, a group that numbered virtually all major contenders in the market-place. Other companies announced that they would soon be selling receivers as well. The industry was anxious to follow RCA's plunge. Ignoring the FCC's delay on formalization of signal standards, they also overlooked the FCC's denial of licenses for anything other than the experimental use of television.

Not even the mighty RCA had permission to sell commercial time to advertisers to support television broadcasting. Sarnoff wanted the World's Fair opening to go down in history as the arrival date for commercial television. Knowledgeable observers regarded the event in more sanguine terms: rather than opening the market for commercial television, the event only signalled the beginning of another phase of experimentation, one in which the public would be allowed to participate through the availability of a handful of receivers. Television's commercial payoff was still years away. *Fortune* Magazine published a broad assessment of television to coincide with the Fair opening, which described the new medium as Sarnoff's "Thirteen Million Dollar 'IF'."

Meanwhile, RCA and Farnsworth were still at loggerheads in their negotiations for a patent license that would permit RCA to put its market power behind Philo's invention. RCA had already conceded that it was not possible to produce electronic video without employing techniques that were covered by Farnsworth's patents. That portfolio included all phases of electronic scanning and synchronization, electrostatic and magnetic focusing, electron multiplication, the sawtooth wave, blacker-than-black horizontal blanking—in short, all the fundamentals of manipulating electrons to send pictures through the air. By 1939 Farnsworth had obtained more than 100 patents. But RCA was still unwilling to pay Farnsworth a continuing royalty for the use of his patents.

The negotiations bogged down when RCA proposed a clever variation of its now-familiar trading philosophy. Instead of paying a continuing royalty, RCA proposed to pay all the royalties in advance, and then proceeded to insist

on a rather meager figure—something in the low six figures. Farnsworth's lawyers flatly rejected the proposal and sent RCA back to the drawing boards.

Shortly after the opening of the World's Fair, Philo and his family moved to Indiana where he assumed his position as Vice President and Director of Research for Farnsworth Television and Radio Corporation. Despite his own misgivings about assuming such a role, Farnsworth became actively involved in assembly line engineering and product design.

It wasn't long, however, before his mind went back to the subjects with which he was preoccupied earlier. Once again his mind ventured toward the unknown. Product engineering became tedious and boring, but he considered it part of his personal obligation to finish what he had started. So he spent most of his days working with engineers at the plant, and his evenings working over the ideas and equations that had always been his primary interest.

Legend has it that Mr. Schairer had tears in his eyes as he signed the document.

The importance of the occasion was accompanied by very little fanfare. It passed virtually unnoticed except within the industry. It is understandable that RCA was not particularly anxious to publicize the terms of the agreement, lest the industry be given the impression that RCA was handing out licenses and royalties for the asking.

To the contrary, RCA's capitulation to Farnsworth strengthened the company's resolve that such a license would never happen again.

If television was just around the corner—as David Sarnoff started saying back in 1936—then the corner turned out to be World War II, which provided the sort of economic and technical mobilization necessary to support television on a large scale. Development of most domestic communications—including television—was suspended during the war as the electronics industry geared its

his proposals, saying that the company was too involved in gearing up for mass production of televisions to devote any resources toward unrelated research.

Philo sympathized with the Board's point of view, but he could not go back to fitting all the tubes into a cabinet and reducing the number of knobs. In the spring of 1940 he packed his journals and retreated to the pastoral isolation of his farm in Maine. Almost the moment he arrived he started pacing out the foundation of a laboratory he was going to build adjacent to the house, which served as his private retreat throughout WWII.

Farnsworth Television and Radio did quite well on defense contracts during the war, and seemed to be in an excellent position to capitalize on the market for television receivers that was booming. But clumsy management caused the company to falter. Farnsworth returned to Fort Wayne in 1948 in hopes that his presence might keep the company solvent, but even he was surprised when he learned the true severity of the company's position.

Ironically, the company lost its footing at just the time that demand for its principal product was beginning to soar. The company was sold to International Telephone and Telegraph in 1949 for an exchange of stock, and Farnsworth Television and Radio disappeared from the New York Stock Exchange.

Farnsworth remained in Fort Wayne until 1967, when he resigned from his position with ITT and moved back to Salt Lake City, where he died in 1971.

In its obituary on March 12 the *New York Times* described Philo as "a reserved, slender, quiet and unassuming man, tirelessly absorbed in his work. At the age of 31 he was rated by competent appraisers as one of the 10 greatest living mathematicians."

In the course of the past two centuries, many names have been associated with the inventing of television—Nipkow, Baird, Jenkins, Zworykin, and dozens of others. None of these names would be remembered today if Philo Farnsworth hadn't breathed life into the dream that obsessed them all. Recalling Farnsworth's place in the process provides a point of demarcation between the dream of sending pictures through the air and the reality that the dream has become.

Television seemed like a logical extension of all the technological developments that preceded it. Modern communications began with the telegraph and the telephone. Radio made it all wireless, and film made it possible to record images.

Television was long-awaited as the culmination of these developments. Early attempts to transmit images tried to use existing technology. The leap from photomechanical processes to magnetic deflection and electron scanning, however, was not a matter of mechanics, but of theory.

Farnsworth's direct involvement in the development of television dropped off after 1940, largely because of his interest in moving on to higher levels of theoretical research. Nevertheless, he always kept a watchful eye on his brainchild as it swept across the nation and the world. Although he was absorbed in his own work in the 50's and 60's he saw enough of commercial broadcasting to be disappointed in what he viewed. He felt that the medium's more constructive applications had been neglected, and wondered aloud at times if all the energy he spent on television was worth the effort.

Copyright, 1977. Paul Schatzkin. All rights reserved.

PHILO



This portrait probably comes closest to the mythification of Philo by ITT, the company which bought him out in 1949. He continued research into nuclear physics with the company, leaving four years before his 1971 death to settle in Salt Lake City.

The final chapter

The final chapter in the struggle for television was written in December of 1939 in a conference room high above the sidewalks of Rockefeller Center. A handful of relative strangers were assembled to finalize the long-awaited cross-license between RCA and Farnsworth.

Ironically, none of the principals in the story were present. Neither Sarnoff, Zworykin, nor Farnsworth. Instead, the transaction was conducted by lawyers for both sides, who had included in the agreement a historic precedent: after Donald Lippincott, Farnsworth's long-time patent attorney, authorized the agreement. Otto S. Schairer, RCA's vice president in charge of patents, sat down to affix his signature to the first contract that ever required RCA to pay patent royalties to another company.

assembly lines to produce radar equipment and military communications gear. When the war ended, those factories converted easily to producing television receivers, which the commodity-starved public was eager to buy in mounting numbers.

The remainder of Farnsworth's life could fill another volume. This one ends at the point where the inventor and his first invention begin to travel separate paths.

While the public became preoccupied with an invention that had first appeared 20 years earlier, the inventor was now projecting his own imagination 20 years farther into the future.

Even as the RCA license was being finalized, Farnsworth was drawing up plans for new lines of research which he first proposed to the Board of Directors of Farnsworth Television and Radio in the summer of 1940. The Board rejected

Marketing "Live From Lincoln Center"

PBS audience or cable cash?

By ALEXIS GREENE

Almost anyone with a television set knows by now that Lincoln Center for the Performing Arts has been producing live telecasts on public television. By using low light level cameras that can be placed many unobtrusive feet from the stage, Lincoln Center can now televise ballet, opera and concert performances without anyone in the audience being the wiser: no extra lighting, no camera blocking anybody's sightline. And home viewers can enjoy the privilege of a live performance and not have to feel that television is intercepting what they see. *Live From Lincoln Center* means a no-frills telecast; high-quality television, but without gimmicks. No horn-players floating into the center of the screen, not even a dissolve.

Live From Lincoln Center is a product in search of a market place. For the next two years the series will be transmitted by PBS, but what Lincoln Center chooses to do with its product after that time could have enormous impact on the long-range well-being of the Center. For various reasons, pay cable is the system which most often comes up in any discussion of Lincoln Center's television future.

The history of cablecasting at Lincoln Center goes back to November 10, 1971, when the New York City Opera's production of Rimsky-Korsakov's *Le Coq d'Or* was televised live from the New York State Theatre by Teleprompter Manhattan Cable. Four cameras were focused on the stage from the first ring of the theatre, the performers wore no special make-up, there had been no special rehearsals beforehand. Citing the fact of the live telecast in the *New York Times* the next day, John O'Connor called it "a breakthrough of significant proportions."

What was significant to Teleprompter and to the people at Lincoln Center was that 16 percent of Teleprompter's 42,000 subscribers tuned in to the opera. There was some negative criticism of the telecast. O'Connor for example thought more cameras should have been used and he felt the audio transmission was uneven. But the general success of the telecast led Lincoln Center to establish a Media Development Department in June 1972. The Department's purpose: to explore possible links between CATV and the various performing arts divisions of Lincoln Center.

Lincoln Center's second fling at cable did not come off so well. There was an attempt to put together a series of performances by the New York Philharmonic and the Chamber Music Society, to be cablecast by Teleprompter in September '72, but union costs killed the project. Since then, the Media Development office has worked toward perfecting the techniques of live performance transmission and has been researching what kind of television system would be most appropriate for Lincoln Center.

Why television for Lincoln Center in the first place? The reason, not surprisingly, is money. In fiscal '75-'76, for instance, Lincoln Center's annual budget was around \$80 million—but box office revenues were only about \$47 million,

which left a \$33 million gap to be filled by the people from Exxon and Texaco. And even after government funding, private funding, and individual contributions, there was still an \$8 million deficit.

The Center's Media Department personnel are both optimistic and cautious when talking about Lincoln Center's television options. Technical director Mark Schubin tends to be explicit about the direction Lincoln Center will take, while director of Media Development John Goberman is apt to be noncommittal about the final result of his department's work.

Schubin's analysis of the Center's television opportunities is to the point: commercial television is not the answer to Lincoln Center's problems. To begin with, says Schubin, the "opportunity cost" is too high; no network would schedule an opera telecast in prime time, for fear of losing audience to other networks; an opera broadcast would be relegated to some less than eye-catching time slot, with the result that Lincoln Center would not reach its greatest potential audience. A commercial network might broadcast a live performance as a one-shot deal, or to satisfy some FCC requirement—and Schubin says Lincoln Center isn't ruling out the possibility—but commercial television doesn't promise any lasting answers.

The fourth network is a route still being explored, but the cost is really prohibitive from the independents' point of view. It takes 450 people to put on an opera, all those people have to be paid some kind of fee, and no independent or group of independents can afford that kind of expense.

PBS? Not the answer either, says Schubin. The foundations and corporations which underwrite Lincoln Center also support the programming on public television. Foundation money would of necessity have to be spread around, and Lincoln Center would never receive enough funding to subsidize the many live transmissions the Center hopes to present.

Cable TV can't handle the costs any more than the independents can, so that leaves pay cable, which Schubin says "seems to be an extremely deficit-eating prospect for us." According to Schubin, Lincoln Center would not lease a cable channel, but would operate along the lines of Home Box Office, a wholly owned subsidiary of Time-Life, recently topping one million subscribers. Lincoln Center would make arrangements with a cable operator; the cable operator would get a percentage of the subscription revenues; subscribers would buy a "Lincoln Center Channel" and pay a periodic fee, probably by the month.

But, where Home Box Office, for example, scrambles its picture and delivers perfect sound to the non-subscribing viewer, Lincoln Center would deliver a perfect picture but scramble the sound for the non-paying person at the receiving end. For the sound of Lincoln Center is really the Center's most valuable commodity.

So, Schubin has designed a pay TV box which contains what he calls an "audio security" device. This patented audio descrambler, together with another patented component that can de-



Beverly Sills in "The Barber of Seville".

liver stereophonic sound, will be in a box that is attachable to a baseboard of a television receiver. A wire would go from the box to the subscriber's own high-fidelity equipment, to produce stereophonic sound for all Lincoln Center productions and to produce a stereo channel as well. Listeners would end up with sound as good as the sound their audio systems produce normally. Manufacturers have told Lincoln Center that the box can be built for as little as \$6 a unit.

Stereo descrambler in hand, Schubin foresees wonderful opportunities for Lincoln Center's cable channel. He envisions nationwide distribution, cablecasting of at least twelve hours per day, including one live transmission a night. Schubin cites a report that M.I.T. did for Lincoln Center, to the effect that "under poor to fair conditions, with percent of 1975 cable subscribers taking the Lincoln Center product (based on terrestrial distribution), Lincoln Center would have a 20 percent return on an investment of \$8 million. Under reasonable to good conditions, with a very good distribution network and with 10 percent of 1975 cable subscribers taking, Lincoln Center could conceivably have 120 percent rate of return on an investment in excess of \$25 million—which would mean that the first year Lincoln Center could wipe out the deficit practically."

Of course, the chances of anybody giving Lincoln Center \$25 million are pretty slim. When would *Live From Lincoln Center* have its first year on pay cable? Well, Schubin could see it happening two years from now. He says "It's a matter of getting the thing so firm that we can walk into a bank and say, 'We need this much money; give it to us, and then we will be on the air with *Live From Lincoln Center*'."

Goberman, the Center's Media Development Director, is a lot more conservative than Schubin when it comes to public evaluation of his department's research. He chooses his words very carefully and will not commit Lincoln Center to pay cable even while he acknowledges that revenue from pay cable could make a "sizable dent" in the Center's deficit. Goberman stresses the constantly evolving state of the cable industry, he stresses that live transmission of the performing arts is an area that hasn't

been dealt with before and that the going has to be slow. He says it could take ten years to discover which television system would be right for Lincoln Center. He points out that the center is a non-profit institution and as such must avoid risk or even the appearance of risk; Lincoln Center cannot afford to lead its subsidizers down the wrong path. Goberman says the Department's investigations are definitely in the preliminary stages and compares their status to that of a building which you might have blueprints but no building site. He is not willing to dismiss any TV system at this stage of the game; as long as there is funding for PBS broadcasts, Goberman feels there will be PBS broadcasts from Lincoln Center.

There are differences in the ways in which Schubin and Goberman discuss Lincoln Center's TV plans, but the reasons for the differences are not apparent. Possibly Schubin is over-exuberant, possibly Goberman doesn't want to jeopardize any potential arrangement by coming down on the side of one approach or another.

Last July the National Endowment for the Arts announced that it was awarding the Metropolitan Opera Association a challenge grant of \$1,500,000, which means that for every grant dollar, the Met will have to raise three dollars of its own. Thus has the Met been rescued from its latest financial crisis (until the grant came through, the Met was threatening to cancel its '77-'78 season).

The Endowment's program may be an indication that the Federal Government is inching toward increased support of the arts, but in the absence of regular government commitment, an organization as large as Lincoln Center is going to have to find its own continuous source of revenue. So there may be pressure on Lincoln Center to go for the highest revenue yielder among all its television possibilities, which at the moment both Schubin and Goberman see to be pay cable. The Met should be able to keep its head above water for at least the next two years (it has two years in which to raise its matching funds), but other Lincoln Center constituents are not so well off. As of this writing, the Vivian Beaumont Theatre is without a tenant, and it may cost Lincoln Center less to keep the Beaumont dark than to run it at a loss. Goberman says that in reality Lincoln Center has stayed afloat by not doing as much programming as it is capable of—it has cut back expenses by cutting back on services. Why else, queries Goberman, would the New York State Theatre have had to be closed this past summer? Goberman does not say definitely that Lincoln Center management is relying on Television to get them out of their hole, but he does say that "they are taking this prospect very seriously—all the constituents are".

Does Goberman feel there would be a reason to consider pay cable at all, if there were not such a great revenue potential involved? "No," says Goberman. "If we got any real government funds, and there weren't a financial problem but there was a political problem—that is, to prove to the farmer in Kansas that it was worth supporting opera in New York—then we'd be looking for the widest possible dissemination of performances and then we'd be talking about broadcast; obviously cable is limited, and pay cable is even more limited, and the real basis for it is revenue".

Alexis Greene is a freelance writer researching a book on the performing arts in television.

Seven Years of Public Access

100 active access centers

By MAURICE JACOBSEN

Public access to cable television—less than six years ago it was no more than a theoretical concept. Today it is legally mandated by the FCC and is an integral part of over 300 cable systems throughout the country.

Although every cabled community has a history of access unique unto itself, there are some important benchmarks. Currently there are over 100 active access centers producing thousands of hours of programming each month. These cable affiliated and independent facilitating groups are gaining a measure of stability and community acceptance thought to be "blue sky" only a few years ago. Three-quarter inch video production hardware is vastly improving the technical quality of programming; a new lobbying organization, *The National Federation of Local Cable Programmers* has been formed; and new people having the combination of enthusiasm and commitment are joining the movement continuously.

Yet all those working in access agree they are still only scratching the surface. So in reality where does access stand today? Has demystifying the technology and creating truly responsive community-based programming proved too difficult a task? Is public access going to become an integral part of our communications systems? Or is it simply a good idea that just hasn't made it?

Initial practice and policy

The scene is the ornate conference room of the National Academy of Sciences in Washington, D.C. The date is March 11, 1971. Dean Burch, then chairman of the Federal Communications Commission, opens the first of a series of hearings on the future of cable television.

"Communications is akin to the Nation's circulatory system," states Burch, "and its own vitality, its own constant renewal is critical to the Nation's health and future growth." It was a prophetic line, as Washington was at the time bracing itself for massive demonstrations against the Vietnam War.

The topic at hand on this March afternoon was the new services cable television could offer the public, and no less a personage than TelePrompter president Irving Kahn was the first to address the Commission. He would soon be convicted of bribery in obtaining franchises for his cable network, but on this day he spoke directly to the issue of access.

I believe that cable systems have an absolute obligation to provide public access channels to all individuals and groups with a reason to address their fellow citizens ... if channels are made available, if access, if you will, is provided and if the Commission sets up the proper controls over this access you will have solved what appears to be the basic problem, not as to who owns the systems, but as to everyone who wants an opportunity having their voice heard.

Kahn's place in the history of access, however, was already cemented. The previous year, during hearings held in

New York for the purpose of granting contracts to wire Manhattan, and being under pressure from public interest groups and individuals, he stated TelePrompter "would open two public channels at no charge unless we are precluded from doing so by FCC action."

They weren't, and the principle of free access was established. Both TelePrompter and Sterling Manhattan Cable received 20 year contracts to wire upper and lower Manhattan, as a result.

One year later, in July 1971, the public access channels were opened as the franchise required and rules for their use were issued—rules which ultimately became the basis for a national access policy.

But what is access?

In judging the criteria for determining the success or failure of public access, one is faced with a perplexing dichotomy. If we are to judge it solely on its existence and the mechanics of getting programming produced, some straightforward guidelines can be established and used as reference points. If one is to judge the concept of public access as a social phenomenon, however, and as a tool for social change, the issue becomes greatly clouded. Both aspects—that of program product and the motivating forces behind the production—are critical to any discussion of the status of access.

There would be no demand for cable access if over-the-air broadcasting allowed for a full and open exchange of information and granted time and space for developing new ideas. But, of course, it doesn't. There are countless economic, technical and political reasons why this is so.

There has never been any attempt by the broadcast industry to positively address itself to the issue of direct public involvement in the communications process. Broadcasting is a closed system, a system whose mainstay is still white-dominated, over-commercialized entertainment fare.

Thus, if we use the simple criteria of judging whether public access gives voice to people historically denied one, we have a place to begin an analysis.

Interestingly, the FCC uses the same premise to justify access in its requirements. Stating in the 1976 *Cable Report and Order on Channel Capacity*:

...We continue to believe that the public interest can be significantly advanced by the opening of cable channels for use by the public and other specified users who would otherwise not likely have access to television audiences.... There is, we believe, a definite societal good in keeping open these channels of communication.

But while in one breath the Commission lauds the citizen's right to access, in the next it relegates it to obscurity by cutting out its heart.

On the other hand, these public benefits must be carefully weighed against the cost and requirements they impose...in addition to direct capital and other expenditures which the requirements entail, there are the other costs in lost flexibility and initiative which are likely to fol-

low with any attempt to impose detailed governmental regulations on private business concerns. Thus, abstract notions of public good must be carefully tested as to their cost and practical realistic impact.

What we have then is a legally mandated base for access. Cable operators must provide channel space and playback facilities on systems with greater than 3,500 subscribers.

Herein lies the core of the problem: money. Whoever controls access to the financial and equipment resources needed to make programming, controls access to cable.

We must address ourselves, therefore, to three main points: 1) How does the community at large learn of the existence of access; 2) How is that community taught to use the system; and 3) Is the system being used to its full potential in giving voice to groups and individuals who need it the most?

New organizations

To serve the need for access a new type of organization appeared. Its purpose was to serve as a liaison between the cable system and the public. In virtually all communities where on-going programming now exists, there would be no public access if it were not for the existence of these "facilitator" groups, or a cable operator who assumed a similar role.

If one looks at the nature of these 100 or so organizations spread around the country there are some striking similarities. Most were organized and are currently staffed by white, middle-class college-educated men and women in their early and middle twenties, whose motivation comes out of a belief in the concept of opening channels of communications. The majority of these groups have an unstable economic and equipment base. Despite that, there seems to be universal optimism for the future. As Marta Peck of the York, Pennsylvania Community Access Center puts it: "I think that access, more than ever, is a viable concept; that as long as there's still the FCC mandated support for access I think we have no place to go but up. I really think if we all hang in there and keep fighting that access will continue to grow."

The term "facilitator group" can be attributed to the Alternate Media Center (AMC), a grant-supported affiliate of New York University. Because AMC has been a catalyst for many access projects around the country, and because its influence over access strategy has been and continues to be significant, it is important to take a close look at its philosophy and history.

Over the past six years, AMC has been involved in several major national projects. The first, supported with a major grant from the Markle Foundation, was to establish community-based access workshop programs in several cities across the country.

A pilot project in Reading, Pa. for example was started after negotiations between executives from ATC Cable—who had read about AMC—and AMC staff. Staff member Phyllis Johnson moved to Reading to organize the "Community Video Workshop," teach classes in operating the portable half-inch equipment, and produce and schedule programs in cooperation with the local cable company. A twelve-inch newspaper ad and news story which ran in the *Reading Sunday Eagle*, January, 1972 proved to be the basis for an access organization that has existed since (see profile on next page).



Top—public access taping of neighborhood sports.
Bottom—The FCC Commissioners. First row l-r: Lee, Farris, Quello.
Second row l-r: White, Washburn, Brown, Fogarty.



Using a similar approach AMC then set up several other workshop programs, including ones in Orlando, Florida, Bakersfield, Calif., and DeKalb, Ill.

The Alternate Media Center's second national program was created to place interns in cable stations for the purpose of producing community-based programming. The National Endowment for the Arts funded the three year project to support about 12 interns each year. Half the salary was paid by AMC, half by the cable system or institution where the intern worked. In addition, each intern was provided with a portable half-inch video system and expense paid trips to New York for workshops and evaluation.

These model projects are intended to stimulate community involvement in the communications process and they have been successful on many levels. But the Alternate Media Center is a one-of-a-kind organization. Funding has been substantial, and it has had a high degree of visibility.

Now both the intern and workshop programs are over. Although the foundations AMC built remain, communities must look to themselves for continued support.

AMC's programs emphasized the willingness of the cable operator to be an integral part of the funding and structure of each venture. Community groups and institutions, although considered essential for developing programming, were not part of the financial underpinning. Negotiations between AMC and the cable companies were held in a spirit of "good faith." If a cable operator wished to pull the funding plug, the local project was faced with an immediate crisis. In Bakersfield the workshop project collapsed for this reason. Yet in Reading and other communities as diverse as San Diego, Calif. and Dubuque,

Iowa, where there is continued cable support, additional community, foundation, and institutional support has followed.

Using the criteria of making cable access effective as a universally available medium of communication, how then do the AMC projects as well as the numerous other local access groups measure up?

For one thing, the types of programming produced on a day-to-day basis are a direct reflection of the age, lifestyle and philosophy of those serving in the facilitator role. It has proven difficult for a middle-class college student to teach a welfare mother to use the cable so that she can directly communicate her concerns to the community at large. Differences in education and production seem to create difficulties for the vast majority of people who could benefit the most from using the cable.

Most grassroots organizations are not convinced access is a valuable resource for them to use. They simply do not have the time or energy needed to produce programming on the sustained level needed to build meaningful audiences. In addition, as there are few minorities or working class middle-aged individuals currently working in access organizations there is not the diversity necessary to generate broad-based community support. As a result, access is not yet a truly integrated community resource.

So, in its fifth year, where does the access movement stand? There are three main points to consider. First, public access is legally recognized and mandated by the FCC. But only channel capacity and playback facilities are currently required. No meaningful equipment, staff, or financial support is provided for.

Second, local access groups have developed across the country. Some have been initiated by the cable operator, but the majority of them are independent. They are significant, but historically they have been under-equipped and understaffed, and have not been able to serve all constituencies as well as they would have liked.

Third, as negative as these factors appear, there continues to be considerable optimism for the future. This is born out by a continued growth in the movement, more stabilized community acceptance, new funding sources, better equipment, and a growing maturity of those who have been involved in the movement over the years.

The future of public access to cable is inextricably tied to one element: money. Whether one discusses FCC regulation, production process or programming, the focus must always return to the economics of the issue. Without a stable funding base, access will be a hit-or-miss proposition, based on the amount of local participation which can be generated.

In order for access to thrive there must exist strong mandating legislation, enthusiastic cable support, a viable method for program production and broad-based community participation. All of these factors deal directly or indirectly with how many resources are available.

The FCC has been and most surely in the future will continue to be most important in determining the fate of access. If it were not for the Commission's rulings, cable access would probably exist only in a few isolated communities.

With cable's expanded channel capacity it has been impossible for the Commission to completely ignore the concept of access. While acknowledging the

Four Access Centers: Organization, Funding and

Reading PA.

Reading is perhaps the best known site of community responsive cable programming in the country. It is primarily a blue-collar working class community with a variety of ethnic backgrounds including Pennsylvania Dutch, Italian, Polish, and many people from coal mining areas. About 36,000 homes subscribe to the services of Berks Cable, a subsidiary of American Television and Communications (ATC).

In 1972 New York University's Alternate Media Center (AMC) began a public access project there, and in 1974 it chose the town as the location for an experimental project designed to test the applications of interactive television. The Center chose to work with Reading's senior citizens, and set up the system so it would incorporate feedback from its participants and thus meet the needs and interests of those it served.

AMC did not want Reading to become dependent upon it, but instead provided the training, technical assistance and support which would facilitate the community's becoming self-reliant.

The senior citizens program the channel two hours a day, five days a week. Their programming includes live location, and call-in shows from the studio and various remote locations. A split screen is often used to show people at two locations talking to one another, and a telephone connection at the headend allows for call-ins from home viewers.

Program content ranges from guests discussing sex and religion with the viewers/participants to forums for airing complaints, suggestions and opinions of local government.

AMC phased out its involvement in February of 1977 and left the community knowing there was a local commitment to insure the survival of the project.

At this time, two of the systems' twelve channels are used for community programming. According to Liz Stevenson, access director for Berks, there are 75 to 80 hours of access programming each week, with 35 to 40 or more of those being purely local. At least one third of that time is filled with live productions.

ATC sees access as an integral part of its business in Reading and has made such investments as a recently purchased color studio for local programming.

Stevenson describes the access center at Berks as "just another department within the company. We pool and share with the other departments."

The trend at Berks is to give technical support to producers from the community and to function primarily as a distribution center for programming, said Stevenson. Assistance from Berks, however, is helping access production to become more stable.

Local support for community programming also comes from interested individuals and area businesses, and some of the local independent access producers are receiving federal, state, and local grants for their work.

The situation in Reading is unique because of the interactive experiment, the

cable company's support, community awareness and commitment, and other factors. It's a place, said Stevenson, where "there are dedicated people. They want it to happen, and it's working here. I don't think it happens in too many places in the country. Our parent company dumped a whole lot of money into another system and it didn't work. The equipment doesn't necessarily make it happen. It's the people."

Danbury CT.

Three years ago the Danbury Library started an access program with one staff person, funded by the city. Today, through state library grants, CETA funds, and continued local government support, the staff has grown to include directors, outreach workers, technicians, and part-time assistants.

The Danbury area is growing rapidly, becoming a relocation spot for a number of corporate headquarters. According to Project Coordinator Phil Lebowitz, this trend is raising the socioeconomic level of the community, which has many different ethnic groups, including Portuguese, Hispanic, black, and Lebanese.

The cable system, owned by Tele-Prompter, serves the communities of Danbury and Bethel, a combined population of some 70,000 in which fourteen thousand homes are wired.

Danbury access averages six hours of programming each week, most of it produced in cooperation with community and civic groups.

Some of the regular programs produced through the Video Department are *Wonderclock* and *Storytime* for children, *Job Services* with the Connecticut State Employment Service, and *Art-scape*, which highlights local artists.

Because the library is part of the city, final authority for grants, hiring, and other budgeting matters rests with the Mayor and the Common Council, not with project staff.

Funding for the project is "not great," according to Lebowitz. "It's still primarily based on grants. But our most recent grant request is for money to stabilize the project and make it self-sufficient... We're asking for money to buy a ¾" editing system so we can do contract work for local businesses."

Lebowitz feels the project's funding situation could be "a solid functioning thing in two years". Community support from sources other than the municipality is essentially untapped. Right now the only community financial support comes in such forms as groups paying for the videotape they need to do their programs.

Lebowitz says community participation has been surprising. "In terms of time and energy, the community is more supportive than I ever expected. Almost everyone who's contacted thinks the idea is exciting and worth doing, and commits a lot of energy to doing a show. That certainly implies there's a need that's being serviced."

demand for access time, however, the Commission has consistently avoided coming to grips with the crucial question of who is to pay for it.

This is unfortunate, as there have been numerous opportunities in various filings and petitions for it to address the issue.

In 1973, shortly after the Commission's rules went into effect, attorneys Ed Kuhlman and Margot Polivy filed a Petition for Declaratory Ruling for the access organization Open Channel of New York, which no longer exists. The ideas they presented in the brief are as valid today as they were four years ago.

Basically the petition called for the creation of a local funding pool based on a percentage of revenue from the cable operator. These monies would then go toward the funding of access programming within the franchised area and be administered by an independent access organization. The petition also requested the FCC to "state its view on the general proposal for financing of public access program production through the use of a percentage of yearly subscriber revenues."

The Commission replied by discouraging the use of franchise fees for programming as a general policy. It felt that monies from local governmental bodies, albeit originally generated from cable revenue could lead to program control and politicization of the access process.

Nevertheless, the FCC has shown a willingness to look at individual cases and approve local funding structures which "do not place an undo burden on the cable operator." An important example of this is in Madison, Wisconsin, where the cost of access programming is shared equally by the city, the cable company and the community. It should be noted, however, that it took three

years to bring about this funding structure, and programming has now just begun.

Consequently the need for a mandated economic base persists and the latest effort to create a structure for funding on a national level has been initiated by the office of communications of the United Church of Christ (UCC), in association with the Consumers Union of the United States and the Association of Catholic Broadcasters.

The UCC's efforts cannot be taken lightly since it was through their efforts that citizens groups initially obtained legal standing before the FCC. An important test case gave citizens legal rights to challenge broadcast license holders.

While acknowledging the demand for access time, the Commission has avoided the crucial question of who is to pay for it . . .

In their latest drive, the UCC has formally asked the Commission by way of a Petition for Rulemaking to, "identify the possible financial and cultural contributions of pay-cable to the attainment of a suitably balanced and diversified communications service."

It's a new twist to the old argument, but now it has added impact. In the past, cable operators could cry poverty when asked to substantially contribute to community programming. Their theme was "let us build the system and get some revenue coming in. Then we can provide additional community services."

In many communities that has happened. Pay-cable systems are running

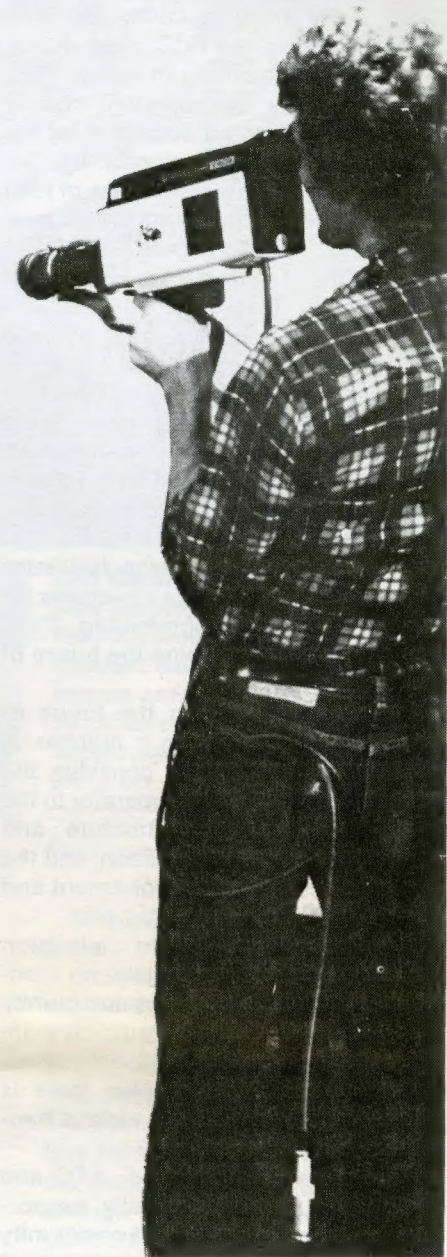
and have turned the corner making the entire system profitable.

The timing for a renewed look at cable operators and their responsibility for the support of community programming is ripe. Recently the FCC lost a challenge to its right to impose restriction on the acquisition of feature films for pay cablecasting. This case, initiated by Home Box Office, the largest pay-cable operator, has forced the FCC to reassess its regulatory policy.

Steve Rifkin, attorney for United Church of Christ, argues that, "... Thus far, the Commission has taken no significant steps to further the development of a link between pay-cable and community access to cable. However, the Court of Appeals, in its Home Box Office opinion, has acknowledged that pay-cable revenues could support the development of cable generally, and has suggested that a regulatory philosophy that promotes such cross subsidization might be consistent with its Home Box Office ruling. Citing the claim of some pay-cable advocates that restrictive pay-cable regulation weakens 'the backbone of successful cable operation' and 'precludes cultural and minority programming that could otherwise piggy-back on a cable system supported by more broadly popular fare,' the Court emphasized that 'certainly an inquiry into this problem would be appropriate in any proceeding the Commission might consider.'"

It's a classic trade-off: in exchange for letting pay-systems develop with few regulatory restrictions, they must divest some of their profits. Of course, the major questions of how and how much are issues that must still be addressed. But there is now an important wedge that can be used for setting a national policy.

There's no way of knowing how the



Programming in Reading PA., Danbury CT.,

Lebowitz feels access has the best chance for survival in an area like Danbury, where there is no local TV station. "In the next year or two, things will level off. People who are really using it as part of the functioning of their organization or for some other personal reason will continue more or less self-motivated. It will reach a level at which it can sustain itself."

York PA.

York Community Access Television (YCAT) began operation with a portapak from the NEA-funded Alternate Media Center (AMC) cable intern program two and a half years ago.

125 members and \$100,000 later, YCAT is just now beginning to build up enough credibility and visibility to turn to the community for funds. "Many people still don't understand the nature of what public access is," according to YCAT Board President Marta Peck. "They still think of us as a locally-based TV station that runs on the broadcast model. We haven't been able to make it clear that we are public access and they can come in and make their program and put it on the air. They don't understand that if they really want to do it they can—that's the only criteria."

Like many other access centers around the country, YCAT has realized that financial support from the community is critical.

"Cable access, we're finding, really doesn't fit into any of the existing funding criteria," says Peck. "We really can't get money from NEA because we're not a regional media center. It's difficult to develop other funding proposals because most of them are not based on providing money for on-going operating expenses, and we're past the seed money point."

YCAT is beginning to eye franchise fees for funding. Peck claims \$40,000 is available and feels some of that should be earmarked for the access. Already one salary is paid by York's cable company, Cable TV of York, a subsidiary of the Susquehanna Broadcasting Co. Five other staff members are paid out of Title VI CETA funds.

Located at York Community College, YCAT uses a two-camera studio facility. All tapes produced through the center are 1/2" black and white. They have a portable two-camera system with a switcher and an SEG that they call a "real clunker." Their only portapak is the one on loan from AMC.

YCAT boasts about 125 individual and organizational members, with membership fees ranging from \$5.00 to \$15.00. Voting rights, a monthly newsletter, and production privileges come with the membership. A 15-member Board of Directors runs YCAT.

Cable TV of York has a penetration of 60 percent. It currently averages 10 to 15 hours of local programming each week. Most is produced by YCAT membership rather than staff. Peck feels it must be this way for the project to continue successfully. She feels most people served

by the cable have seen an access program at one time or another but admits that "our largest audience is comprised of those people in the production or who have someone they know or are related to in the production itself."

Programs include a weekly phone-in show with the president of the city council or the local congressman as the regular guests. Peck says it has been well received and that "the phone calls are non-stop. Phone lines are tied up constantly."

"Insight", a weekly religious program dealing with various issues and also utilizing the phone-in format is another success. YCAT also runs three to four hours of Hispanic programming every Sunday evening for the 3,000 Spanish-speaking residents in the area. "Everyone in the Spanish community is aware that that's the only Spanish programming available to them on the entire cable system," said Peck.

Having to contend with growth is rarely easy for non-profit access centers, and York is no exception. "Initially we attracted people interested in doing video, not organizational people," observes Peck. "We're in the transition now, trying to phase video people out of the board and put organizational people on—send the video people back to video production. That transition has been very difficult."

Training is another problem at YCAT. Before being allowed to use the equipment unsupervised, trainees must go through a four-month period of learning and supervised use of equipment. Only six people are trained at a time, and

Peck says most people burn out. The waiting list for workshops now has 70 names on it.

The decision to structure training this way was made by a committee and approved by the board. The staff was opposed to the decision, and the conflict resulted in what Peck describes as a "tremendous amount of fighting—almost warfare."

In spite of the organization's problems, Peck is optimistic about the group's future. "We've gotten past the point where continued survival was a question. It's assured. The question now is what form are we going to direct it into. We're going to be here. There's no doubt about that. Too many people care."

Marin CA.

A small group of Marin county residents, aware of FCC access rulings, started Marin Community Video (MCV) in 1973. Ranging from those with limited production experience to county leaders, the group began with a used portapak. An educational effort succeeded in interesting the numerous city councils in Marin County to pressure Viacom Cablevision, which holds the franchise, to provide access time. MCV has since focused on strengthening resources and facilities, and providing community services.

FCC will act on the question of access funding. By allowing cable television unfettered reign, the FCC undoubtedly will demand something in return. That something may be copyright royalty payments made to broadcasters for the re-transmission of their signals. This fee would be based on a percentage of total revenue. There won't be much left over to share with public access.

Since the National Association of Broadcasters (NAB), the trade organization of the industry, has a huge presence in Washington, and community programmers are but a tiny constituency, the existence of strong local access groups is all the more important. Without them there would be no one to speak for the public's right of access.

While the FCC established the foundations for access, it was the facilitator groups that have built the structures for the production of programming. Their future may well determine the future of access.

In any discussion on the future of access groups there are a number of variables that one must consider; the commitment of the cable operator to the concept; the staffing structure and philosophy of the organization; and the amount of community involvement and support that can be counted on.

Throughout the cable television industry there is absolutely no conformity on the question of community programming. Each multi-system operation has its own philosophy. Even within the major companies there is inconsistency between the various franchised areas.

Of the major companies, ATC and UA/Columbia seem generally supportive of access, viewing local community programming as an integral part of building subscriber bases especially in

urban markets. Other major companies—Warner, Time-Life and Viacom—have come through with some novel approaches to community programming when pressed. Tele-Prompter, the nation's largest MSO, is totally schizophrenic. Cox Cable, with a conservative southern philosophy, seems totally uninterested in doing anything beyond what is directly ordered by the FCC.

In general, cable operators are extremely reluctant to spend money on anything that is not directly going to bring them a return. Some operators are now beginning to think that strong local/access programming will bring them that return in added subscribers and in some cases give them an edge when bidding for new franchises in adjacent communities. This is important because interest is renewed in wiring the major urban markets because of improved financial conditions and the profitability of pay operations.

Competition for these markets has created a growing awareness on the part of city governments as to the reality of community programming. The future looks good, therefore, for required local origination facilities to be established as part of new franchise agreements.

But, of course, it takes more than cable company hardware or even staff to produce responsive broad-based community programming. There must be an independent presence to keep the operator honest, to generate interest, and, most importantly, to educate the community on the specifics of program production and channel utilization.

Few, if any independent access groups have long-range funding committed for staff. But there are some encouraging signs. Currently CETA, the federally funded Comprehensive

Employment and Training Act is paying the salaries of probably half those directly working in access production. Portable Channel in Rochester, New York and the San Diego Community Video Center both have over 10 CETA employees working on specific access related projects. In addition, virtually all access groups with any long term standing in their community have CETA people on their staff. However, most of these positions fall under Title IV of the CETA act. Under this program employees are hired on a one year basis to complete a specific self-contained project.

The concept of community television is years away from achieving the goal of being an accurate reflection of ... the community

At STAND, Inc. in Derby, Connecticut, for example, a CETA staff of four has been hired to identify, train and prepare various "target" groups in the community to produce their own programming for cablecasting locally. The project will obviously be a success if the minority groups and senior citizens continue to produce programming after the CETA staff is no longer available to facilitate production.

Nonetheless, CETA funding appears "permanent" for the immediate future. There are several moves being made in Washington to give greater emphasis to community and arts related projects. Staff salaries are more and more carried by institutional sources such as city gov-

ernments, libraries, and universities. But staff alone is not going to make access an accepted community resource.

There is an intricate balance that must be achieved. In an ideal situation there would be a live studio available for regular programming, state-of-the-art portable video hardware for independent production, and a sensitive staff available to help produce community programming in cases where groups or individuals have neither the time or inclination to produce programming completely on their own. There must be mutual respect between independent access groups and cable operators, each knowing the importance of each other. There must be a stable funding base. There must be staff of all ages and backgrounds to educate the community and promote programming. There must be adequate resources for publicity and promotion.

In retrospect the access movement has nothing to be grossly ashamed of in the early stages of its growth. It currently exists in a legislative and economic climate that is lukewarm to its existence. Yet it has grown from a simple concept to a complex reality.

There are still questions that must be resolved: what are the best methods of organizing the community; how can people most in need of receiving access truly gain that access; what are the best methods of long range funding.

No one involved in the access movement thinks that the answers will come easily. The concept of community television is years away from achieving the goal of being an accurate reflection of the needs and desires of those in the community. But through trial and error answers are being sought. As cable television grows, public access will grow with it.

York PA., and Marin CA.

By SALLIE FISCHER

MCV now has two full time and one part time staff, supplemented by one and a half CETA VI positions. Although legal responsibility for the organization rests with the Board of Directors, Raymond Rodney, MCV director, says the staff really runs the project.

Membership consists of those who are actually access equipment users and pay a yearly individual membership fee of \$25.00. New membership guidelines are being developed to allow for voting by members and for organizational memberships.

Workshops in portable video and in editing are offered for beginners, and there is an advanced editing workshop as well. After their training, workshop participants have access to equipment. MCV currently uses 1/2" black and white equipment, but plans to acquire 3/4" color equipment in early 1978. Rodney says the current equipment will continue to be used, especially with beginners.

Located in a suburban area north of San Francisco, the organization finds itself serving a community which Rodney describes as fairly wealthy and as having many artists, filmmakers, and "others who are likely to use community television." The only large minority group is the black population in Marin City, and MCV's interactions with it have been limited.

In terms of access, Marin Community Video sees itself as having three functions. They teach people how to use video equipment and produce programming, they provide access to equip-

ment, and they work to insure local access on the cable.

The production arm of the group is responsible for three regular programs. "Marin County Review" is a weekly show covering the meetings of the county's Board of Supervisors and is paid for by the county. "Marin Video Magazine", a program about politics, lifestyles, events, people, and entertainment in the county, has been a project of the organization since it first began. The third program, "Public Service in Action", is a series of mini-documentaries about current issues in the county and the organizations dealing with them, and is produced as part of the CETA project.

Rodney says they also act as an advocate of public access on a broader level. A recent activity in this area was MCV's role in helping to organize the Bay Area Association for Community Television, an ad hoc association of access groups from such towns as Hayward, San Jose, and Southington.

During the past year MCV's role in access in the county has changed and the group has had to do some reevaluation. At first, all access programming was channeled through them, and they were responsible for scheduling and publicity. Viacom Cablevision took over that role in February because of a series of events prompted by a request for a rate increase.

When Viacom asked for the increase, the municipalities involved wanted to know what they would get in return. The company hired a consultant whose report recommended a number of steps it

could take to make the increase palatable to the communities.

Based on the report, Viacom set up a microwave link between its systems in the county, installed a \$75,000 color production studio at its office in San Rafael, and allocated an operational budget of \$50,000 a year for two years for community television. Sixty-four per cent of the franchise holders approved the increase.

The \$50,000 is used for one producer, one technical director, a part time crew, maintenance, videotape, and smaller items. The company does not provide training and, in fact, says Rodney, does not allow anyone but its staff to do actual hands-on production.

Rodney says they first believed Viacom was thinking of putting them out of business, but a cooperative relationship on a practical level has since developed. Viacom does studio production, while MCV does mostly on-location taping.

Viacom also contributes to MCV's income, but is insisting the group develop more stable local support. Aside from CETA funds, payment for productions, fees for workshops, and some small contributions from local businesses, financial support from the community has not been particularly strong, although the group is beginning to go after this area of funding.

Community support for MCV's work has been growing, but here again the organization sees the need for improvement. They have been effective in reaching "young white liberals" who already have an interest in media, but haven't made the sort of contact with senior citi-

zens, minorities, schools and others they would like.

In hopes of improvement, MCV has applied for funding to do a detailed audience survey and community needs assessment to determine their effectiveness.

Rodney says they would like to improve and expand their public profile; publicity in the local media has been increasing, and MCV is trying to continue this trend.

"There are now many resources for production," explains Rodney, because the cable company has taken on putting together a color studio and a staff, and combined with the fact that we're here and the local community college has a television production facility—those three centers really offer a lot of production capability. Also, because this is a wealthy, sophisticated and such a highly cabled community, there is a lot of potential here for the expansion of community television."

Maurice Jacobsen is an owner of The Independent Video Company and has worked in cable access since its beginnings in New York, Los Angeles, and Connecticut.

Sallie Fischer is the northeast coordinator for the National Federation of Local Cable Programmers (NFLCP) and a TELEVISIONS contributor.

EPILOGUE

Restoring Philo's Place in History

Challenges to the corporate myth

By NICK DEMARTINO

"There are three languages in which you can talk factually about television," explained a *Fortune* Magazine article on the eve of [RCA President David] Sarnoff's 1939 World's Fair spectacle. "The mathematical slang of the research laboratory, the manic-depressive jargon of Wall Street, and the jitterbug double talk of Variety."

Today we can add the self-serving pieties of corporate public relations to the languages creating the historical record. As eyewitnesses from TV's infancy age and die, the record, with all its inaccuracies, is in danger of becoming permanent.

As Philo's wife Pem Farnsworth observes, "When you want to know about TV, you eventually go to RCA." The record as written by RCA is easily accessible, and largely presumed to be authoritative. The problem is that RCA's claim to have invented TV is based on a technicality.

It is a simple question of patents. Every patent bears two dates—the date of filing and the date of issue. History records the patent at its date of filing, regardless of when a ruling on the patent is issued.

matics will vindicate his place in history. He could see what was underlying the world. Like Einstein, he crossed another threshold, he spoke another language."

Pem herself became committed to asserting Philo's place in the history of TV. "As time went by and RCA became more open in its claims, I became more resolute," she says, beginning to conduct interviews with her husband about five years before his death in 1971.



Cliff Gardner holds the image dissector tube (above) produced last summer for the 50th anniversary celebration. Gardner works (left) on the tube, which was an exact duplicate of the original he created under Farnsworth's supervision, as Philo T. Farnsworth III looks on.



Farnsworth finds friends

Meanwhile, more people continue to join the fight that Pem Farnsworth leads. A University of Illinois graduate student named Steve Hofer has been working on a Ph.D. dissertation on Philo's accomplishments. TV historian Al Abramson, whose new book will cover this period, has been approached with the facts by Mrs. Farnsworth. A cousin who works for the *World Book Encyclopedia* is trying to change the inaccurate entries in that publication.⁷

Paul Schatzkin first heard of Philo in 1973. He had seen an issue of *Radical Software*⁸ featuring an elegy to Philo by Max Crosley, a Farnsworth relative. "The Electromagnetic Spectrum Blues," painted in florid verse the tragic victimization of the genius inventor.

Shortly thereafter Schatzkin discovered George Everson's biography of Farnsworth. The book transformed his life and that of associate Georja Skinner, a sound recordist for Norman Lear sitcoms.

Schatzkin, who worked at a commercial video house called Videography, convinced his boss, Bob Kiger, to get involved. The two formed a partnership to develop the Philo story into a made-for-TV movie.

The first step was to buy the rights to Everson's book. They travelled to Gualala, on the Mendocino coast north of San Francisco to meet the 93-year-old Farnsworth associate and offered a

the help of the oldest of their three sons, Philo III, to relocate most of the documents.

Since then, with hours of interviews and research completed, Mrs. Farnsworth is writing the book she hopes to complete this year—the book which should set the record straight.

The *New York Times* obituary in 1971 gave Philo sole credit for television's invention. But scores of other sources either ignore him entirely or give him second or co-billing with Zworykin, Baird or the others who worked on elements of television systems in the 20s.⁴ All manner of print has been manufactured which depicts for posterity a distorted view of Philo's role.⁵

When we called Les Brown, author of the just-published *NY Times Encyclopedia of Television*, he said that entries on Zworykin and Farnsworth containing errors were contributed by an associate. Brown said he has little expertise in the technical side of TV, and even less interest in resolving a dispute between Farnsworth and his competitors.⁶

¹Fortune Magazine, May 1939. No author listed.

²A 1962 piece in *Television Quarterly* (Vol. 1, No. 4), published by the TV Academy entitled "The Early Days: Some Recollections," Zworykin makes no mention of Farnsworth or any other inventors but his mentor Rosing, Dieckmann, and Campbell-Swinton. In a 1976 interview he answered the question "Was there a rivalry among you?" with this: "Not in electronic television. We were not competitive in this area." (*Videography*, Vol. 1, No. 9)

³Everson, George. *The Story of Television: The Life of Philo T. Farnsworth*. Originally published in 1949 by W.W. Norton. Reissued in 1974 by Arno Press in its series of Telecommunications reprints edited by Christopher H. Sterling.

⁴A good example is the July 1976 issue of the *SMPTÉ Journal*, on the occasion of the Society of Motion Picture and Television Engineer's Own 60th anniversary. (Vol. 85, No. 7) "101 Years of Television Technology" by CBS TV's Director of Engineering Richard S. O'Brien and others. It starts with George Carey's idea for TV in 1875, marks Baird's 1925 experiments as the first practical TV demo. Baird, of course, was not working with electronic TV.

In a response to Schatzkin's challenge of these facts, O'Brien lists 11 sources, most of which, he admits, "trace back to Zworykin's own statements."

⁵The three most recent TV sourcebooks are *The TV Book* edited by Judy Fireman (New York: Workman Publishing Co.), *Television: The First Fifty Years* by Jeff Greenfield (New York: Harry N. Abrams), and *The NY Times Encyclopedia of Television*.

All three of the books inaccurately credit Farnsworth, though the Fireman book is by far the worst. Designed as a popular catchall assembled by editor Fireman, it features contributions from a wide array of familiar and not-so-familiar TV commentators. In addition to a full-length interview with Zworykin and only a footnote-sized picture of Farnsworth, the volume sports an account of TV technology by John Taylor, a man Fireman says was referred to her by *TV/Radio Age* as a "good popularizer." Taylor retired as an RCA V-P for marketing and had spent a career flacking for Zworykin. Claimed Taylor when we called: "Farnsworth was a smart guy, but he didn't do anything to make television a business."

⁶The contributing editor is David Lachenbruch of *Television Digest* who told us that "the record was already established when I wrote those entries," noting that "Zworykin is virtually made by RCA."

⁷Those with contributions to make will soon have an opportunity: a foundation is being established. *TELEVISIONS* will carry news of this soon. Meanwhile, if you have other contributions, Mrs. Farnsworth can be contacted directly at 2121 Garfield Avenue, Salt Lake City, Utah. 04108.

⁸Gietzen, Philip. "Videocity" issue of *Radical Software*, Vol. 2 No. 3 (New York: Gordon and Breach Science Publishers, 1973).

⁹One point O'Flaherty made in several columns was the shameful lack of even a historical plaque at 202 Green St. The oversight has been rectified by the current owners of the building, which now houses a pharmaceutical firm.



PHOTOS: GEORJA SKINNER

Author Paul Schatzkin, flanked by Mrs. Philo T. Farnsworth and her brother, Cliff Gardner, prepare for the Sept. 7, 1977, anniversary of electronic television. Pem Farnsworth, top, is finishing a biography of her late husband.

Philo T. Farnsworth won every single challenge launched against his patent claims by Sarnoff. Sarnoff, as a result, was forced to pay Farnsworth royalties.

Yet RCA's engineer Vladimir Zworykin went down in history as the inventor with the earliest patent on electronic television: 1923. A technicality in another patent case, some 15 years after Zworykin's original claim, was the cause (see story, page 10).

With the help of RCA publicists, Zworykin bolstered his fragile claim. Still living, still giving interviews and writing articles,² Zworykin is the beneficiary of a generation of RCA P.R. flacks who believed, and perpetuated, the myth which has served RCA so well.

By the time that Farnsworth intimate George Everson's biography, *The Story of Television*,³ appeared in 1949, Philo himself was long removed from direct involvement with his own invention. The company that bore his name had been absorbed into International Telephone and Telegraph.

Perhaps Pem Farnsworth is right when she predicts that "Philo's original mathe-

That 1977 was, in fact, the 50th anniversary of electronic television has been shown by Paul Schatzkin in the four-part series which concludes in this issue of *TELEVISIONS*. Other dates and other names have been recorded, but the truth is that the electronic TV system we use today was not demonstrated until Sept. 7, 1927, in that loft at 202 Green Street, San Francisco.

The historical record, on the other hand, tells another story. The most recent edition of *Encyclopedia Britannica*, for instance, describes Farnsworth simply as "United States engineer." RCA's Vladimir Zworykin gets several inches in which he is crowned "the father of television."

For her part, Philo's widow, Pem has undertaken the task of writing the definitive biography. "It was 1939 when I told Phil I was going to write his biography," recounts Pem. She was mindful at the time of her husband's lack of interest in self-promotion, and so began amassing documents and lab notes. Most were destroyed in a fire in 1947. Over the years Pem has managed with

modest sum for the movie option. They got something even more valuable—an introduction to Pem Farnsworth, who agreed to discuss rights to the book which she and her son, Philo III, were developing.

By December 1975 a deal was made and the team began developing a treatment for the movie script. The plan was to air the program on Sept. 7, 1977, the 50th anniversary date.

In the process of trying to sell the idea, the two enlisted more allies in the struggle to restore Philo's good name. Columnists Richard Hack, of the *Hollywood Reporter* and Terence O'Flaherty of the *San Francisco Chronicle*,⁹ ran stories on Sept. 7, 1976, in support of Philo.

One response to Schatzkin's attempt to interest the TV networks in Philo's story illustrates the resistance there is to restoring credit to Farnsworth. "Although television itself is of paramount interest to all of us," wrote a functionary at CBS, "it is my feeling that this alone does not make the life of the man who invented television necessarily of dramatic interest. . . . His trials and tribulations on the way to fame and fortune are familiar to the American success story and so too his ultimate rejection of the fruits of his own invention. . . . It is rare when a true life story has the appropriate ingredients so it plays out less as biography and more like a movie."

Shortly thereafter the *TELEVISIONS* series began. The partnership with Kiger had dissolved, and Schatzkin, by now a videotape editor for the *Barney Miller* TV show, realized that he and Skinner had neither the time nor the experience to successfully develop a TV-movie script.

Recreating the past

Their priority became the plan, spearheaded by Philo's oldest son, an inventor himself who lives in Bolinas, California, to create a media event on Sept. 7, 1977. Their intent was to re-create the actual demonstration that ushered in the TV age.

By summer the services of a Hollywood PR man, Bob Garon, were enlisted to make contacts in the media world.

One aspect of the campaign was to convince the newly reorganized Academy of Television Arts and Sciences to award a special Emmy to Philo on the Sept. 11 telecast, just four days after the 50th anniversary celebration that was being planned. At the Sept. 1 Board meeting of the Academy the proposal was voted down. The fact that NBC intends to telecast a program on Philo this year and that members of the

20-member board, including president Larry Stewart, either worked for NBC or on shows associated with NBC/RCA facilities may have had nothing to do with the decision. But, as Garon put it, "who wants to make NBC mad?"

Philo III, supervised the enormous task of recreating the exact experiment that his father's "lab gang" had demonstrated in 1927 for the Sept. 7 celebration. His uncle, Cliff Gardner and others went to the University of California campus in Berkeley, where the first glass tube had been blown 50 years earlier, to manufacture the image dissector. With elaborate care the new lab gang, which included members of the original group and a group Philo III rounded up, assembled the device to make it work.

When the day arrived at the Foothill Electronics Museum near Palo Alto, not only was there a crowd of nearly 100 that included Pem, Cliff, Tobe Rutherford and others who had worked with Farnsworth, but TV crews from NBC, CBS, local San Francisco TV stations, and a number of video producers. Ironically, the NBC Nightly News carried, over the network built by RCA's David Sarnoff, news of the inventor of TV.

The questions remain

Why must the widow of television's inventor spend video's golden anniversary year fighting to set the record straight? The answer tells us much about the role of the independent inventor in corporate America, about the limits and rewards of "genius," and mostly about the manufacture of myth and history in a disposable culture.

One reason, of course, is the man himself. Farnsworth was concerned more with his research than with exploiting the potential of his most famous invention. Unlike men like Westinghouse, Edison, Ford and Eastman, he had little enthusiasm for creating an industrial empire that could manufacture and market products from his patents, as well as propagate his legend.

The man who did that, of course, was David Sarnoff, the name most closely associated with the marketing of television in this country. Sarnoff's realization of Farnsworth's idea was the national network we think of today as television.

Philo would have been perfectly happy to allow his patents—65 when he died—to generate income from rental or license fees that could finance further research.

He discovered soon just how idealistic an idea this was in the age of corporate sponsored, high-capital research which

must first be adapted to the marketplace in order to return profits and glory to the company. Contributions to human knowledge would be mostly useful as a publicity device at some later point in the company's development.

Of course, Farnsworth isn't the only inventor who has suffered such a fate. Edwin Howard Armstrong, a pioneer in radio and the inventor of FM and high fidelity, not only had his credit for certain inventions stolen, but was forced out of RCA because Sarnoff refused to develop FM radio as a competitor to AM.

"Over the years Armstrong filled bulging filing cases with letters to authors, editors and newspapers, futilely trying to keep the record straight. And not merely his own record, but that of Marconi, Fleming, Tesla and Pupin, all of whom, as independent inventors. . . were being subjected to the same kind of corporate devaluation. The powerful corporations by then wanted not only all the profits

but all the control and scientific credit as well."¹⁰

Erik Barnouw, whose work credits both Armstrong and Farnsworth,¹¹ cites another, more blatant corporate rewrite—the General Electric TV ads featuring a kindly old Thomas Edison bestowing credit to GE company man Ernst Alexanderson that belonged to Reginald Fessenden.

By the time Farnsworth's invention came to fruition, the companies founded upon the genius of American inventors had become huge profit mills which strangled, not encouraged inventiveness.

¹⁰Lessing, Lawrence. *Man of High Fidelity* (New York: Bantam, 1956) p. 238.

¹¹Barnouw, Erik. *The History of Broadcasting in the United States*, Vol II: *The Golden Web*, pp. 38-43. Also, *Tube of Plenty*, pp. 77-83. (Both New York: Oxford). A video account which follows the Barnouw description is *Supervision: Tales of Television*, produced by TVTV in episodes that followed the 1976-77 season of *Visions* on PBS.



A carton of Winstons, \$80, Garry Moore's "eternal gratitude"

One tribute Philo T. Farnsworth received from the industry he helped to create was a 1957 appearance on the popular TV quiz show, "I've Got a Secret."

Because revealing his identity would have given away his secret, he was identified only as "Dr. X". His secret—shown to an audience of more than 40 million—was simply, "I invented electronic television." A silence fell on the studio audience as they were shown the second card: "In 1922 when I was 14 years old."

Celebrity panelists Bill Cullen, Jayne Meadows, and Harry Morgan questioned Dr. X. Cullen thought he was a medical doctor involved in some new form of surgery and asked if he had invented some kind of machine that might be painful when used. The mysterious doctor replied, "Yes, sometimes, it's most painful."

Meadows asked if his work was associated with psychiatric cases. The doctor, noticing the laughter in the audience, answered, "Well, no, not especially." But master of ceremonies Garry Moore could not ignore the opportunity for a joke and added, "In very rare instances, it has been known to cause a few. . ."

The questions became increasingly off-target, so Moore terminated the game and introduced his special guest to the panel. Some discussion ensued about Farnsworth's early career as well as his new experiments with advanced physics. But the emcee had to make room for a commercial, and he dutifully curtailed the conversation.

"Dr. Farnsworth," Moore said politely, "we could sit here for many, many hours and talk—most fascinating man I've ever met in many a long year—but, unfortunately, television being what it is, it's your baby, and we're out of time."

With this Philo T. Farnsworth was presented his reward for inventing television: a carton of Winstons, eighty dollars cash, and Garry Moore's "eternal gratitude: "we'd all be out of work if it weren't for you." —Paul Schatzkin

SUBSCRIBE!

☐ Enclosed is \$10 for a 1-year subscription (individual prepaid rate)

☐ Enclosed is \$15 for a 1-year subscription (institutional rate)

☐ This is a renewal

name _____
address _____
city _____ state _____ zip _____

Send to: SUBSCRIPTIONS/TELEVISIONS
P.O. Box 21068
Washington, D.C. 20009

"Corporate legend-building has, as we all know, unfailingly focused on corporation executives—the merchandisers. Seminal innovators like Fessenden, De Forest, Armstrong, and Farnsworth, whose work made the industry possible but who did not become members of corporate hierarchies, are seldom mentioned in industry memoranda. You have done a great service with this vivid retelling of the Farnsworth story."

Erik Barnouw